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ABSTRACT

The Hartford project, an experimental effort to reduce residential burglary, street robberies, and fear of those crimes in an urban residential neighborhood, is described. Its most distinctive feature is its integrative approach in which police, community organization, and physical design changes were used to increase the willingness and ability of residents to control their neighborhood and reduce criminal opportunities. Implementation efforts are detailed in terms of: (1) closing or narrowing streets as a strategy for reducing outside traffic; (2) instituting a neighborhood police unit; and (3) creating area organizations to work with the police and initiate resident efforts to improve the neighborhood. The evaluation of the program contains an assessment of success factors including neighborhood involvement and physical changes. The appendices contain the survey instruments, data collection procedures, supplemental data, and the resident survey interview schedule. Extensive tables and illustrations are also included. (Author/HLM)

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Reducing Residential Crime and Fear:

The Hartford Neighborhood Crime Prevention Program

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FOREWORD

This report presents the results of an experimental crime prevention program in Hartford, Connecticut, sponsored by the National Institute of Law Enforcement and Criminal Justice, and designed to reduce residential burglary, street robbery, and the concomitant fear of these offenses in a neighborhood showing signs of increasing crime accompanied by physical and social deterioration.

The program was based on a new "environmental" approach to crime prevention: a comprehensive view addressing not only the relationship among citizens, police, and offenders, but also the effect of the physical environment on their attitudes and behavior. Prior to Hartford, the National Institute had funded a number of studies which had included physical design concepts in crime prevention programming. However, the Hartford project and its evaluation was the first attempt at a comprehensive test of this environmental approach to crime control.

As a pioneering effort in the integration of urban design and crime prevention concepts, the Hartford project expanded the field of knowledge about the role of the physical environment in criminal opportunity reduction. Many of the theoretical advances that were made in the project have now been widely adopted in the field of environmental crime prevention.

In addition to its theoretical contributions, the project generated considerable practical knowledge about the implementation of an integrated crime prevention program. As an example of the successful application of theoretical principles to an existing physical setting, it provides a realistic test of the practical utility of its underlying concepts and should thus represent a valuable model to urban planners and law enforcement agencies in other communities.

Finally, the Hartford project has important implications for evaluation. The data collected before, during, and after the experiment were extensive and methodologically sophisticated. As a result, the evaluation is an especially rigorous, thorough, and scientifically sound assessment of a comprehensive crime control project, providing an excellent model for future program evaluators.

Although only the short-term (one year) evaluation has been completed, the early findings offer encouraging preliminary evidence in support of the major project assumption: that changes made in the physical environment of a neighborhood can produce changes in resident behavior and attitudes which make it more difficult for crimes to occur unobserved and unreported. A substantial reduction in residential burglary and fear was observed in the experimental area and, while less conclusive, there appears to have been an effect on street robbery and fear as well.

It must be remembered, however, that these findings reflect only short-term program impact and thus provide only tentative indications of potential program success. More definitive conclusions will be possible only after a re-evaluation of the program -- currently in its initial stages -- has measured the long-term program effects on crime and fear in the target area.

Lois Mock
Fred Heinzelmann
Community Crime Prevention Program
National Institute of Law
Enforcement and Criminal Justice

PROJECT DOCUMENTS

The following documents have been produced by the Hartford project:

REDUCING CRIME AND FEAR: THE HARTFORD NEIGHBORHOOD CRIME PREVENTION
PROGRAM: TECHNICAL RESEARCH REPORT.

This is the principal document, providing the most thorough and technical description of the research. Sections of the report present detailed discussions of (1) the background, conceptual framework, and objectives of the program; (2) the data sources, methods and findings utilized in identifying and analyzing target area crime problems; (3) the design of a comprehensive program for reducing target area crime, including strategy components for the physical environment, the police, and the community residents; (4) the implementation and monitoring of program strategies; (5) the evaluation methodology and findings for assessing program impact on target area crime and fear; and (6) the conclusions and implications of the Hartford project experience for crime control program design and implementation in other urban residential settings. Finally, extensive data tables and research instruments are presented in appendices to the report. This technical document is of primary interest to the research and academic communities.

REDUCING CRIME AND FEAR: THE HARTFORD NEIGHBORHOOD CRIME PREVENTION
PROGRAM: AN EXECUTIVE SUMMARY REPORT.

This document is a summary of the technical research report, described above, presenting an overview of the major project concepts, objectives, findings, and implications. It necessarily omits much of the technical detail of the research and is of interest to a broader, non-technical audience of urban planners, program implementors, and criminal justice personnel.

The appendix of the Executive Summary consists of two related working papers which describe problems and special issues relating to the project. The first, entitled Implementation of the Hartford Neighborhood Crime Prevention Program, describes the special problems encountered in implementing future programs. The second, entitled Evaluation of the Hartford Neighborhood Crime Prevention Program, addresses some of the special problems and issues encountered in the research and should be of primary interest to program evaluators and other researchers.

A limited number of copies of both published reports are available from the National Criminal Justice Reference Service, P.O. Box 6000, Rockville, Maryland 20850. Copies are also available for sale from the Government Printing Office in Washington, D.C.

Abstract

REDUCING RESIDENTIAL CRIME AND FEAR: THE HARTFORD NEIGHBORHOOD CRIME PREVENTION PROGRAM

The Hartford project was an experimental effort to reduce residential burglary and street robbery/pursesnatch and the fear of those crimes in an urban residential neighborhood.

Its most distinctive feature was its integrated approach: police, community organization, and physical design changes were all used to increase the willingness and ability of residents to control their neighborhood and reduce criminal opportunities.

The neighborhood, North Asylum Hill, was located near downtown Hartford and several insurance office buildings. Its population of 5000 residents was largely unmarried, either older or younger adults, living in low-rise apartment houses. A section of the area had two and three-family houses. At the time of the experiment, slightly less than half the residents were white.

Analysis of the crime in the area was undertaken by an interdisciplinary team. Its task was to understand the way in which residents, potential offenders, police and the physical environment interacted to create criminal opportunities; and to design inexpensive strategies that could be quickly implemented to intervene in a pattern of rising crime.

One principal conclusion of the analysis was that a number of features of the physical environment were working to destroy the residential character of the neighborhood. Cars and pedestrians from outside the neighborhood passing through the area dominated the streets and depersonalized them. The streets belonged more to outsiders than to residents, creating an ideal environment for potential offenders.

In 1976, a three-part program was implemented including:

- a) closing and narrowing streets as a main strategy for reducing outside traffic on the streets and for increasing the residential character of the area.
- b) instituting a neighborhood police unit with strong relationships to the residents.
- c) creating and encouraging area organizations to work with the police and to initiate resident efforts to improve the neighborhood and reduce criminal opportunities.

A careful evaluation of the program was carried out after the program was fully in place for nearly a year. The evidence is that rate of burglary and residents' perceptions of the incidence of burglary were clearly reduced, while a pattern of increased robbery/pursesnatch was halted. All of the program components had a role to play and produced some positive results. However, among the various changes observed, increased resident use of and efforts to control the neighborhood appeared to be the most important reasons for the initial success of the program. The physical changes appeared to be essential to achieving these results.

AUTHOR'S PREFACE

In July 1973, a meeting was held at the Hartford Institute of Criminal and Social Justice. At that meeting, there were two project monitors from NILECJ, an expert in urban design and planning, a former Chicago police officer with a Ph.D. from Harvard in public administration, a lawyer who had made a commitment to become involved in criminal justice policy, and a social psychologist who was an expert in survey research methodology, together with various support personnel. That meeting was the first official event in what was to become known as the Hartford project.

The original schedule called for an 18 month project. During the first six months, the problem was to be analyzed and a model program proposed. In the next three months, the program would be implemented. Six months later, the impact of the program would be evaluated, with three months to prepare a final report.

The fact that this report is being written in 1978 should not be attributed to a lack of dedication or effort on the part of the participants. Rather, it is a reflection of the naivete of the initial project outline. A great deal has been learned since 1973 as a result of the Hartford project. Those who assembled in Hartford in July, 1973 did not know how little they knew. We hope that the report that follows will do justice to the wisdom and understanding that we have gained.

F. J. Fowler, Jr.

ACKNOWLEDGEMENTS

The planning of the experimental crime control project and the evaluation of the resulting program was funded by grant number 73-NI-99-0044-G and 75-NI-99-0026 from the National Institute of Law Enforcement and Criminal Justice to the Hartford Institute of Criminal and Social Justice. The Center for Survey Research (formerly the Survey Research Program), a facility of the University of Massachusetts/Boston and the Joint Center for Urban Studies of M.I.T. and Harvard University, had overall responsibility for evaluation of the program and for preparation of this report. However, the project lasted five years, went through many phases, and involved numerous organizations and individuals whose work was essential. Because of the number of people contributing to this project, it is inevitable that some will not receive the acknowledgment that is their due. However, we will attempt to identify as many of the most critical people as possible.

The Hartford Institute played an essential role in the entire project; as the grantee, it had the responsibility for coordinating all aspects. There was no component of the project to which the Institute staff did not contribute. However, their most important role was working within the community to facilitate and coordinate the implementation of the program.

Brian L. Hollander, President of the Hartford Institute, was personally involved in all phases of the project. Other Institute staff members who deserve special mention include Francis X. Hartmann, who took considerable responsibility for the Institute's role in monitoring activities in Hartford; Robert Wiles and Richard Pearson, who had primary responsibility for working with the neighborhood groups and monitoring their activities; Rudolph Brooks, who worked closely with the Hartford Police Department and was responsible for collecting police record data; and Rinda Brown, who

played an important role in producing the written products from the Hartford Institute.

Richard A. Gardiner Associates, an urban design firm, was responsible for the physical design component of the program. Staff members from RAGA had specific responsibility for analysis of the physical environment and its contribution to crime, development of a general physical design plan to reduce criminal opportunities, design of specific site plans for the physical changes, and development of considerable conceptual and theoretical work which has been used not only in the Hartford project, but also in more recent efforts throughout the country. Besides Richard Gardiner himself, Bruce Tsuchida and Tom Kirvan, landscape architects, Allen Moore, architect and Dr. Sanford Low, cultural anthropologists contributed most to the physical design component of the project.

Initially, as a research associate at Urban Systems Research and Engineering, and later as a faculty member at John Jay College (CUNY), Thomas A. Reppetto played a central role in the analysis of the crime problem and in the early draft of the crime control model that was eventually tested. His previous research in Boston and his personal efforts played a major role in the formation and inception of this project.

James Tien of Public Systems Evaluation, Inc., took responsibility for monitoring the police component of the project during the evaluation year, and also made numerous contributions to early drafts of the project reports.

At the Center for Survey Research, in addition to the authors, Ellen Rothman, who served as a research assistant on the project during the first two years, and Alice Fehlhaber, who served as field supervisor during all four waves of survey interviewing, deserve special mention for their

contributions.

In the City of Hartford itself, many persons contributed to the implementation and evaluation of this project. The Hartford Police Department deserves substantial credit. Under the leadership of Chief Hugo Masini, the Department gave full cooperation to the implementation of the police operations, provided record data, and facilitated the distribution and collection of questionnaires from members of the police teams. Of the many police officers who were helpful, we particularly want to mention Neil Sullivan, currently Deputy Chief, who was the original Commander of the experimental district and who contributed to the successful implementation of the police effort in innumerable ways. Lieutenants Leroy Bangham and Daniel Ward, who headed the two experimental teams, also deserve special mention.

Politically, the entire project would have been impossible without the support of the Hartford City Council and Edward M. Curtin, then City Manager. Despite vocal opposition, these people were willing to take a chance on an unproven program in the hope that something important could be learned about how to reduce urban crime. Also, Jonathan Colman, Director of the Planning Department, spent considerable time with the architects working out the details of the physical changes, and John Sulik, then Director of Public Works, was responsible for the overall coordination of the City's role in their construction. Robert Messier of the Department of Public Works deserves special mention for his role as construction site supervisor.

Thanks are also owed to some 3,000 residents of Hartford who cooperated by giving their time to the various surveys which were an essential part of this project. Thanks are also due to the more than 200 interviewers who worked so hard to carry out these surveys.

Special mention should be made of the contribution of Lois Mock, the Project Monitor at NILECJ, and Fred Heinzelmann, Director of the Community Crime Prevention Program, which funded the evaluation of the project. This project took much longer than anyone had envisioned at the start, and their support of the project through the various delays kept it from foundering. They were intimately involved in all phases of the project, particularly its evaluation. Richard Rau of NILECJ, the original monitor for the project, also should be acknowledged for his role in the initial development of the project.

Members of the project team (at the Hartford Institute, RAGA, and PSE) have read the various drafts of this document. Many of their helpful comments and criticisms were essential to its accuracy and completeness. However, final responsibility for the evaluation, data analysis, content of this report, and conclusions presented rests with the authors.

CHAPTER 1. INTRODUCTION

Overview of the Project

Asylum Hill is a residential area near the business and insurance centers of Hartford, Connecticut. In the early part of the 1970's this attractive area, consisting primarily of low-rise buildings and multi-unit frame structures, was in danger of becoming an undesirable neighborhood. Landlords were reluctant to maintain the housing stock. Long-time residents were leaving. Major factors in this incipient decline were thought to be rising rates of robbery and burglary and the fear they engendered.

In 1973, an interdisciplinary team of specialists began an assessment of the nature of crime in Asylum Hill and the factors that contributed to it. An innovative aspect of their charge from the National Institute of Law Enforcement and Criminal Justice (NILECJ) was to give special attention to the way that the physical environment contributed to crime, either by aiding offenders or by making the task of protection more difficult for police and residents.

From this analysis emerged a plan to reduce crime and fear in the northern half of the area, North Asylum Hill, where crime was more a problem than in the southern part of the neighborhood. The plan outlined an integrated, three-pronged approach to reducing criminal opportunities. It included proposals for changing the physical environment, in addition to changes in the organization of police and efforts to work directly with residents.

Community organization efforts began in the fall of 1974. Police reorganization began early in 1975. Work was begun in the summer of 1976 on the physical environmental part of the program, consisting primarily of changes in the layout of the streets of North Asylum Hill, with the

final construction completed in November, 1976.

Background of Project

The idea that a neighborhood crime control effort must be multifaceted and should include attention to the physical layout of a neighborhood, and how it is used, emerged from a variety of sources.

Studies of offenders had produced several important insights regarding crime control. First, a substantial amount of criminal activity is relatively unplanned.¹ It occurs when a criminal sees an opportunity. As opportunities, offenders prefer a neighborhood environment where they can spend time without attracting attention or feeling out of place. They look for targets which they can approach unobserved. Neighborhoods in which residents are out-of-doors, where surveillance is easy and where non-residents without identifiable purpose are likely to attract attention are less attractive to offenders.²

Studies of police have described what they can and cannot accomplish. Police can retard crime in public places through intensive patrol. However, two experiments in New York City demonstrating this capability involved major increases in personnel assigned to target areas. There is no evidence that random patrol without a significant increase in manpower retards crime. In the Kansas City preventive patrol experiment, completed more recently, varying the amount of random patrol in marked cars did not, by itself, seem to affect crime and fear. Moreover, the decreases in crime produced by intensive patrol in New York were offset by proportionate increases in crime in adjacent areas. Intensive patrol has not been found to be effective against crimes occurring in private places, the most important of which is residential burglary. Studies of arrests indicated that most arrests for robbery or burglary are made at the time

the crime occurs or on the basis of evidence obvious at the scene of the crime. Follow-up detective work yields relatively few arrests; only a relatively small portion (less than 10 percent) of robberies or burglaries are cleared by arrests.⁵ Thus, while police are important, it apparently is inappropriate and unrealistic to think that they alone can reduce crime in a neighborhood.

The role of the citizens in crime prevention is of two types. First, they can assist the police by calling them about suspicious events and crimes that occur. Intervention into a crime in progress offers the police the best chance to apprehend a criminal.⁶ An active citizenry can watch over a neighborhood, particularly private spaces, in a way that police cannot hope to do. Second, citizens can themselves directly affect crime by asserting their control over their own neighborhoods. One way of doing this is through organized patrols or block watches.⁷ However, less formal mechanisms that communicate to potential offenders that residents are concerned about their neighbors and what goes on in their neighborhood also appear to be deterrents to crime.⁸

Four research efforts were the primary initial sources of insight about the role of physical environment in crime. Jacobs observed that certain neighborhoods were relatively immune to crime, despite being located in highly urban settings where crime rates were high all around.⁹ Her conclusion was that two factors contributed to this situation. First, two such neighborhoods had commercial and residential properties mixed together, producing a considerable number of people on the streets and opportunities for surveillance. Second, the residents cared about the quality of their neighborhoods and watched out for one another.

Angel reached a related set of conclusions regarding the role of the physical environment in street crime.¹⁰ His concept of "critical density" was essentially that use of space should be organized so that there were quite a few people on the streets most people used. His contention was that robbery targets were created when there were streets that had only a small number of people using them -- enough to provide targets without too much waiting, but not enough to serve as a deterrent to criminals.

Newman's work focused on the role of the public housing environment in residential crime.¹¹ He found that crimes in public housing projects occurred in places that could not be observed. He also found that if buildings and spaces could be structured to increase the number of doorways and other spaces that could be easily observed from windows and public spaces, the amount of crime was reduced.

Repetto¹² looked at residential crimes in 17 neighborhoods. While proximity to offender populations was an important factor in crime rate, like Newman he found that opportunities for surveillance made a difference; like Jacobs he found evidence that neighborhood cohesion had a deterrent effect on crime.

This set of observations and conclusions was the basis of the ideas that the Hartford project team brought into the initial problem analysis and planning phases of its work. Since then, the implications of these ideas have been more fully developed and articulated than they were in 1973. Although the ideas have evolved over time, their integration may be labeled a new approach to crime control.

Stated abstractly, the approach focuses on the interaction between human behavior and the (physically) built environment. It is hypothesized that the proper design and effective use of the built environment can lead

to a reduction in crime and fear, and, concomitantly, to an improvement in the quality of urban life. Although the purpose of proper design of the built environment is to indirectly elicit human behavior pattern, and the effective use of the built environment represents a direct influence on human behavior, it is the combination of proper design and effective use that leads to a synergistic outcome, where the combination of parts is more effective than any of the parts alone.¹³

More concretely, criminals operate in an environment that includes police, citizens and a physical environment. All three affect criminal opportunities. The total set of relationships among offenders, the police, and citizens, structured by the physical environment, should be considered in analyzing the nature of crime and in trying to reduce it. Some of these relationships are implicit in the research described above and may be outlined briefly as follows:

The physical environment directly affects the movement of offenders by providing places where they can be concealed or be inconspicuous, as well as defining escape routes.

Offenders are deterred by the physical proximity of police. However, given typical police resources, police must choose either frequent presence in a few areas or less frequent presence over a wider area.

Offenders are deterred by citizens who use the spaces in their neighborhoods, thereby exercising surveillance, and who exercise control over who uses the neighborhood, thereby making extended waiting for an opportunity less comfortable.

The physical environment affects the task of police to the extent that opportunities for crime are structured. To the extent that there are

fewer places where offenders may operate freely, either because of environmental effects on offenders or on citizens, the task of police patrol is made easier. The more familiar police are with the distribution of crime over an area, the more effectively they can allocate patrol resources.

The physical environment affects citizens' ability to reduce criminal opportunities in several ways. To the extent that physical surveillance is easy, the citizens' ability to exercise surveillance is improved. To the extent that the environment encourages residents to use their neighborhood, their opportunities for surveillance are increased. In addition, the amount of social interaction among neighbors is affected by the arrangement of housing spaces. A high degree of interaction should increase residents' ability to distinguish between neighbors and strangers. It may increase the likelihood that residents will concern themselves with criminal opportunities, as interaction often leads to increased cohesion. Finally, the physical appearance of the neighborhood may affect the likelihood that residents will care about, or take pride in, what happens in their neighborhood.

Police and citizens can each facilitate the other's success in opportunity reduction. Citizens, as noted, can communicate to police places or events where police are needed. In turn, if police are aware of citizens' fears and concerns, they can be responsive in ways that may reduce fear and increase citizens' use of the neighborhood.

Each of the above points could be elaborated extensively. However, the last two begin to give the flavor of what is meant by synergism: the idea that each relationship, if it is improved, can both affect criminal opportunities directly and, in addition, may produce other results that, in turn, may further reduce opportunities. The interdependence described

means that to neglect the police, the citizens or the physical environment will limit the potential of any program to reduce criminal opportunities.

Project Description

Before 1973, no approach combining police, citizens and the physical environment had been applied to an existing, residential neighborhood.

However, the limits and failures of more limited approaches to crime control, together with the untested but persuasive nature of the rationale outlined above, suggested the need for an empirical test of its applicability and utility.

Hartford, Connecticut was chosen as the site for this test for three reasons. First, there were neighborhoods in Hartford similar to those in many cities where crime is a major problem. It seemed essential to test the approach in the kind of areas where extensive crime control efforts were most needed and most likely to be attempted. Second, the Hartford Institute of Criminal and Social Justice provided an ideal organization to carry out such experiments. As a non-profit institute outside the city government, with strong working relationships with city officials, the police department and the business community, it offered a potential that did not exist in many cities for successfully coordinating and implementing a complex experiment. Third, the project required independent funding of the proposed crime control program, including any physical design changes required. NILECJ could only fund the planning and evaluation components of the experiment. In Hartford, there was an expressed willingness on the part of private and public interests to make capital investments in an existing neighborhood, if a feasible and convincing plan could be developed.

Two areas in Hartford were chosen for initial analysis. Clay Hill/South Arsenal was a minority area with a high rate of various urban problems, including property crime. Asylum Hill was a predominantly white apartment house area, inhabited largely by single individuals, young and old. It had a high rate of transiency and a relatively high rate of street crime. Each area was judged to be similar to areas in other cities likely to have particularly acute crime problems.

The interdisciplinary team, including experts in urban design and land use planning, as well as criminological, police and research experts, was assembled to work with the Hartford Institute. Together, using existing police record data, data from a sample survey of residents, site analysis and the results of interviews with offenders, police officials and other knowledgeable people, this team assembled a composite picture of the crime and fear in the target areas. The principal focus of the analysis was the way the neighborhood environment contributed to the creation of criminal opportunities. A major task for the urban design experts was adapting planning and design concepts to address the specific problem of reducing criminal opportunities. The analysis also included assessment of the roles, current and potential, of citizens and police in opportunity reduction.

The next task was to develop a program which could be implemented fairly rapidly and economically, which was politically acceptable to city leaders and citizens, and which, if successful, would be applicable to neighborhoods in other cities. The team concluded that it could not develop a program for the Clay Hill/South Arsenal area within this set of constraints which would make even a modest difference. Both residents and leaders felt there were better ways to spend money in a neighborhood beset with a wide range of problems. However, the team did feel an acceptable

program could be put together that would reduce crime and fear in the northern half of Asylum Hill.

Although the physical design team made numerous recommendations for long-term changes to strengthen the neighborhood, its proposals for initial steps were:

- a) To restrict traffic through the neighborhood and to channel most remaining through traffic onto two streets.
- b) To define visually the boundaries of the neighborhood and sub-parts of the neighborhood.

The combination of these changes, which could be accomplished in a reasonably short period of time at a reasonable price, was intended to make the neighborhood more residential -- to make it more a place that belonged to the residents, which they would feel part of, which they would take care of.

The proposal for the police was decentralization to create a team that was assigned permanently to the area and that had some autonomy to establish its own procedures and priorities. It was felt that police could be more effective in opportunity reduction if they were familiar with the neighborhood. The proposal also provided an opportunity for increased communication between citizens and police so that each could support the efforts of the other more effectively.

It was felt that an increased citizen role in opportunity reduction would result from the physical changes and, perhaps, from closer relationships with the police as well. However, an important part of the program entailed relating to the existing community organizations and encouraging the development of others. Community organizations were needed to enable citizens to participate in the planning and implementation

of the physical changes. Their approval of the plans was required before the physical improvements could be funded. In addition, such groups provided a mechanism for establishing a Police Advisory Committee through which citizens and police could discuss concerns, problems and priorities. Finally, it was thought that these groups might, on their own, initiate activities directly related to crime and fear or related to improving the neighborhood in general. The purpose of the community organization component of the program was not simply or primarily to mobilize citizens to fight crime. This component was essential to implementing all three parts of the program. Moreover, the goal of increased citizen involvement in crime reduction was expected to be achieved through the combined effects of the physical changes, the reorganization of police and the work of formal community groups.

Community organization work began in the fall of 1974. At that time, there was one existing residents' organization serving the northern part of the neighborhood. Over a period of six months two more organizations serving other parts of Asylum Hill were formed.

The Hartford Police Department created a district which included Asylum Hill early in 1975. Within the district, two teams were created, one of which was designated to serve Asylum Hill. Eventually a plan was approved that entailed eleven changes in the public streets, all in the northern half of the neighborhood.* Two key east-west streets were closed to through traffic. A number of other streets were narrowed at intersections; one was made one-way. One north-south street and one east-west street were left open to carry traffic not routed around the neighborhood.

*The community organization and team policing components of the program were implemented for the entire Asylum Hill neighborhood.

The goal was to make most of the streets in the neighborhood of use primarily to residents. Some of the street narrowings were also intended to give definition to neighborhood boundaries. The intersection treatments were designed to be attractive, including planters and areas for resident use. Work began in June, 1976. All street closings were complete by November, 1976. Some of the final landscaping was added in the spring of 1977.

The formal evaluation period for this program was July, 1976, through June, 1977. The above description of implementation makes it clear that the "program" did not begin on a particular day. The police and community organization efforts began more than a year before the physical changes were begun; and for all three program components, implementation was a process, not a single event. The unique feature of the program was the integration of physical design considerations into a program of opportunity reduction. The "program" could only be said to be in place when the physical changes had been made.

There were three separate, but obviously related, parts to the evaluation:

- 1) To describe the program as implemented. Because there is only one experiment being evaluated, the quality of this description is the main basis on which readers will be able to reach conclusions about the general applicability of the Hartford experiment.
- 2) To assess the impact of the program on burglary and robbery-purse-snatch and the fear of those crimes.
- 3) To attempt to evaluate the extent to which the underlying hypotheses about the way the program was supposed to work

were confirmed or refuted by the experiment.

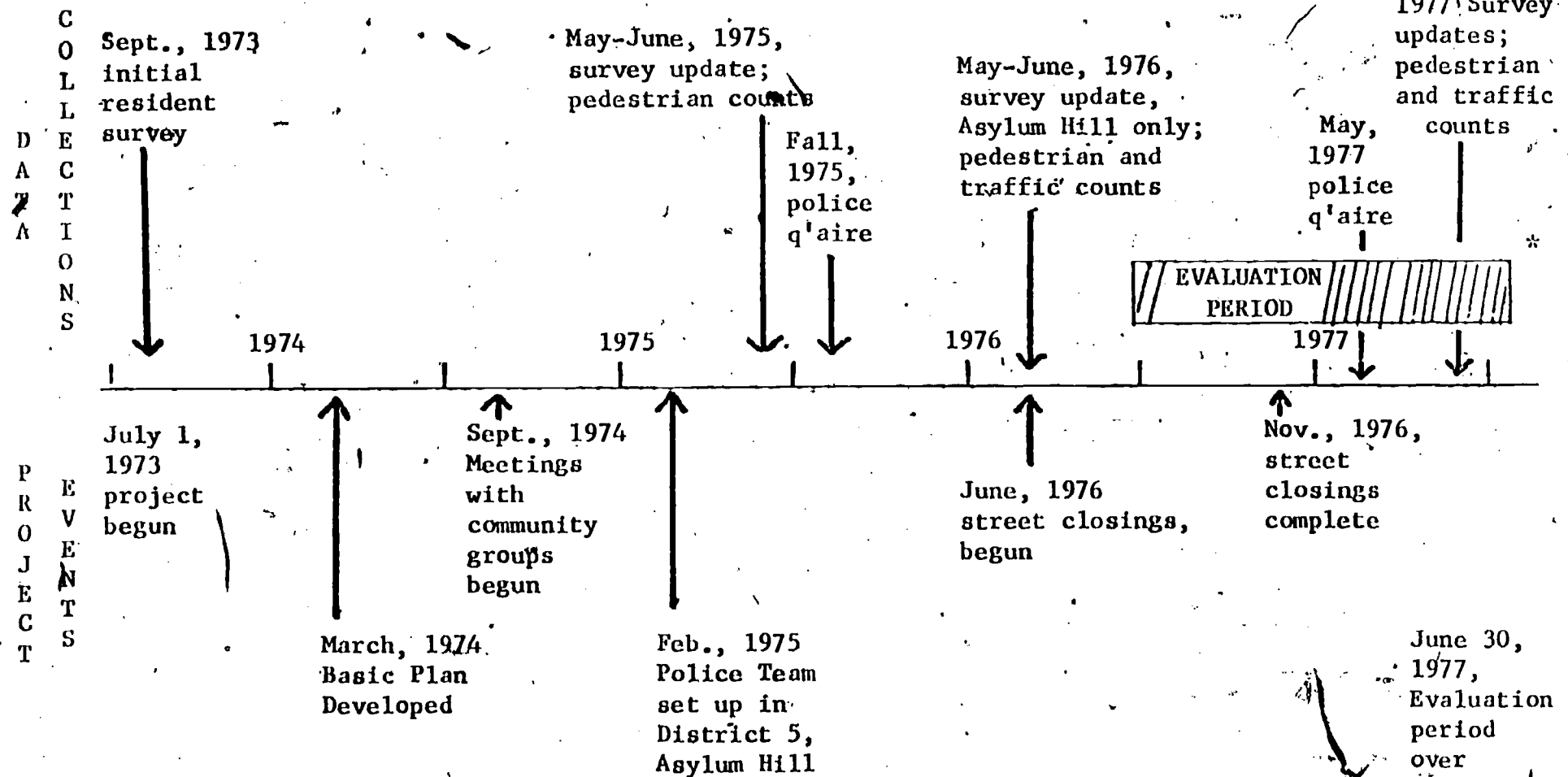
The information on which the description of the project was based came from four sources. First, the Hartford Institute provided periodic written reports describing community organization activities, plans and events regarding the physical program, police activities, and other events in Hartford that might affect the experiment. Second, police activities were monitored qualitatively by on-site visits every six weeks by an outside observer. Third, the physical changes and use of spaces were also observed systematically on several different occasions. Fourth, a panel of about thirty individuals, including community leaders, businessmen, realtors and uninvolved residents was interviewed twice during the experimental year regarding events and happenings in the neighborhood. These sources were supplemented by periodic meetings between the evaluation staff and Hartford Institute staff to discuss events, problems and accomplishments.

The assessment of the impact of the program makes use of these qualitative sources but relied primarily on the following sources for quantitative conclusions:

- a) Citizen surveys taken in 1973, 1975, 1976 and 1977.
- b) Police record data covering information about crimes reported to police, arrests, and characteristics of arrested offenders.
- c) Vehicular and pedestrian traffic counts on key streets taken in 1975, 1976 and 1977.
- d) Questionnaire from police officers, 1975, 1977.

Details about these data sets and the methods used to gather them are presented in Appendix A. An overview of the schedule of project events, including major data collections, appears in Figure 1.

Figure 1: Schedule of Events



*NOTE: Crime rates were for the entire year - July, 1976-June, 1977 - as the evaluation period. However, most measures from the surveys and observations essentially measured key variables - fear, use of streets, etc. - as of June, 1977.

Organization of This Report

This report is primarily about the evaluation of the Hartford experiment. As background, Chapter II describes the analysis of the neighborhood; Chapter III describes the plan that emerged from that analysis.

The main body of the report consists of Chapters IV, V, and VI. Chapter IV is a detailed description of the program as implemented. Chapter V describes the results and explores the evidence for the way the program did, and did not, have the desired effects. Chapter VI describes other developments in the target neighborhood and the city of Hartford that could affect program impacts.

In the conclusion, Chapter VII, we discuss the implications and limits of the conclusions that can be drawn from the Hartford experience.

CHAPTER II

ANALYSIS OF THE ORIGINS OF CRIME AND FEAR

Introduction

This chapter describes the analysis of the way in which citizens, police and the physical environment contributed to criminal opportunities in North Asylum Hill. It was a complex task for at least two reasons. First, there were no models to follow. In particular, the relationship between traditional physical design concepts and opportunity reduction had been outlined only in a very general way. Second, the various disciplines represented on the Hartford team, by definition, came at the problem of crime from different perspectives. The task of blending their insights, findings and analyses into an integrated understanding of the nature of burglary and street crime in North Asylum Hill required a great deal of time and effort.

As noted in Chapter I, the target of this project was reduction of residential burglary and street crime, street robbery and pursesnatch, and fear of these crimes. Burglary is the crime of breaking and entering with intent to commit a felony, most often grand larceny (stealing). Robbery is the crime of taking something from someone by force or by threat of force. Pursesnatch is the crime of taking someone's purse from his/her person. The difference between a robbery and a pursesnatch is often very slight. Uniform Crime Report (UCR) conventions indicate that a pursesnatch becomes a robbery if more force is used than is necessary to pry a purse from the victim. Although pursesnatch per se is not a Part I (i.e., serious) crime, according to UCR conventions, its similarity to robbery and its potential for producing fear in victims seemed to warrant its inclusion with robbery.

These crimes were chosen for two reasons: they are common and they are thought to be fear-producing. Of the "serious" crimes against property,

burglary is usually the most common. Moreover, neither car theft nor grand larceny (which involve theft but not breaking and entering) involve the violation of one's home by a stranger.

Robbery/pursesnatch, though less common than burglary, involves a confrontation with a stranger. The other "serious" person crimes, rape, murder, kidnapping and assault all would be judged more serious by most raters. However, the rate at which the first three occur is extremely low. Moreover, with the exception of kidnapping, the majority of such crimes is committed by persons known to the victims. To the extent that this is the case, they are not subject to community crime prevention strategies.

In this document, we will attempt to describe fully the analytic process. Rather, the purpose of this chapter is to present the integrated analysis results as a basis for understanding the origin of the plans and the context into which the experimental program was introduced.

When the analysis process began, three separate research and analysis efforts were undertaken simultaneously. The physical design team had two principle tasks:

- 1) to describe the physical environment in North Asylum Hill; and
- 2) to analyze the ways this environment influenced behavior of those who used it so as to increase opportunities for burglary and street crime.

Using information and materials available from city agencies, 1970 census data and extensive on-site observation of the area, the features and problems of North Asylum Hill from an urban design point of view were compiled.

At the same time, a team headed by a criminologist was observing police activities and interviewing police, studying police record data and interviewing persons who had been convicted of street robbery in the North

Asylum Hill area. This team had two principle tasks:

- 1) to describe the way in which residential burglary and street crime were carried out in North Asylum Hill;
- 2) to describe police organization and procedures, and to analyze the way police operated to reduce criminal opportunities.

A third team, meanwhile, was carrying out a sample survey.* Asylum Hill residents were sampled at a higher rate than the rest of the city in order to permit detailed analysis of their perceptions and experiences; the sample was citywide in order to provide a basis for comparison. A principal task of the sample survey was to obtain measures of victimization of Asylum Hill residents and their fear of crime. However, sample survey data were also used to supplement other aspects of the analysis:

- 1) to update the demographic description of the neighborhood from the 1970 U.S. Census;
- 2) to measure citizen perceptions of police and police-community relations;
- 3) to measure general attitudes toward the neighborhood and social cohesion within the neighborhood;
- 4) to identify rates at which residents themselves were doing something to prevent or deter crime;
- 5) to identify patterns of the way in which residents use their neighborhood;
- 6) to identify places and problems in the neighborhood which residents considered to be fear producing.

*This was the first of four probability sample surveys carried out as part of the project. Although the sample sizes and rates of selection varied, the sample definitions and field procedures were identical, thereby providing comparable data at each point. Procedures are described in detail in Appendix A.

These efforts went on relatively independently, though there was considerable interaction among team members while they were being carried out. When the respective analyses were completed, the three groups came together to produce an integrated analysis.

Below is presented a summary of the main conclusions which drew on the work of all three study teams. First, we present an overview of the four major components of the neighborhood area that would affect crime: the physical environment, the police, the offenders and the residents. Second, we describe the nature of the crime and fear problem as it was identified. Third, we describe the study team's conclusions about the way the relationships among police, residents, potential offenders and the physical environment created criminal opportunities.

The Physical Environment

The physical environment of North Asylum Hill was analyzed by breaking it into a number of elements. These elements are a combination of the characteristics of the physical environment itself and the way the physical environment is used by people; they provide a useful framework for presenting the major conclusions of the physical design team (Figure 2).

The area called North Asylum Hill is less than one square mile. It consists of about 15 city blocks. A person can easily walk from one side of the neighborhood area to the other in less than 15 minutes.

The population of the area in 1970 was approximately 5000 people, living in approximately 2500 dwelling units.

The boundaries of the area were clear. It was bounded by three relatively busy streets along which were primarily commercial land uses and by a railroad track.

Figure 2
MAP OF THE NORTH ASYLUM HILL AREA



NORTH ASYLUM HILL COMMUNITY AREA
EXISTING TERRITORIALITY PLAN

The predominant land use was residential. The majority of housing units in the area were in low-rise apartment houses. However, there was a section in North Asylum Hill along Sargeant and Ashley Streets, consisting of two or three-family frame houses. Scattered within the boundaries of North Asylum Hill there were several small neighborhood service stores: a liquor store, a drug store, a grocery store, a pizza shop and a cleaner-tailor. The predominant land use, however, was clearly residential; and this served as a touchstone for analyzing the significance of other elements of the physical environment.

The surrounding land use was nonresidential. Several large insurance companies had their main offices adjacent to North Asylum Hill. A large hospital and a factory were within the borders of North Asylum Hill. It is less than half a mile to the main downtown area of Hartford. The bordering streets of the area were predominantly commercial.

A residential area bounded by commercial land use is fairly typical of many urban neighborhoods. One of the main attractions for living in the Asylum Hill area was its proximity to downtown and to work. However, it was the conflict of the relationship between these two land uses, the residential land use within North Asylum Hill and the commercial land use on its borders and surrounding it, which the physical design team identified as one of the critical issues in understanding North Asylum Hill.

The housing stock is also very important to understanding North Asylum Hill. First, being composed primarily of apartments and multi-unit houses, the housing stock dictated a rental population; fewer than 5 percent of the units in North Asylum Hill were owner-occupied. Second, the apartment units were generally small, appropriate for one or two persons. Third, although the housing stock was structurally sound, it was not new. Therefore, it required continuous maintenance. In 1973, there were already signs that

needed routine maintenance was being deferred by some landlords. Unless landlords had sufficient confidence in the neighborhood to invest in routine maintenance, there was the potential that the housing stock would deteriorate.

Generators is the term that planners use for institutions or facilities which structure human activity in an area. In the case of North Asylum Hill, the important generators lay on or just outside the neighborhood boundaries. The insurance companies generated a daily in- and out-migration of employees. The hospital, in addition to employees, generated activity from the coming and going of patients and visitors. Its location was such that visitors frequently parked on North Asylum Hill streets. Finally, three schools, an elementary school, a middle school, and a high school, all located south of North Asylum Hill, generated a daily flow of students through the North Asylum Hill area.

In addition to institutions and facilities, there are also places which generate activity more informally. The most important such generator in North Asylum Hill was a park in the center of the neighborhood area. Numerous teenagers "hung out" in this park, most of them nonresidents. It was a favorite place for men to loiter and drink. A liquor store was located conveniently nearby.

The resident survey showed that the park was consistently identified as a place in which residents did not feel comfortable, in which they were fearful. By observation, it was apparent that many potential users of the park, particularly older people and families with small children, did not use the park. Because of its central location, the park exercised a significant negative influence over resident use of a good portion of the North Asylum Hill neighborhood.

The circulation patterns defined by the streets of North Asylum Hill

were an important part of understanding the significance of the generators.

Although it was easy to circumnavigate North Asylum Hill, the existence of four streets through the residential area connecting the major border streets, one north-south and three east-west, provided little incentive to do so. As a result, some ten thousand cars per day went through North Asylum Hill on their way to somewhere else. In effect, commuters were using these residential streets as major arteries. Moreover, though most of the traffic used these four through streets, the layout of the neighborhood was such that considerable traffic was siphoned onto the other neighborhood streets as well. A particular point that the physical description noted was that all east-west streets carried considerable traffic, even though they were parallel and went to the same places. The effect of having three such streets instead of one, was to disperse heavy traffic throughout the neighborhood.

Transition zones that physically signaled a change in land use from commercial to residential were not clear. Thus, neither those entering the neighborhood nor the residents themselves had any clues from the physical environment that the residential area was separate and apart from the rest of the surrounding environment.

The definition of "semi-private" spaces was seen as another particularly significant problem in North Asylum Hill. People's homes and front porches and usually their yards are "private" spaces where only people who "belong" or "have a purpose" normally go. Main streets are clearly public spaces where anyone can go without being asked his/her purpose or attracting attention. In between, there are a number of kinds of spaces for which it is not so clear who has a right to be there. Legally, these are either public or private, but they may be perceived as either more public than private or vice versa. For example, sidewalks in front of people's homes or even the

streets themselves are technically public. However, in some neighborhoods residents consider these to be their own, use them as extensions of their own private spaces, and take cognizance of and influence activities in these spaces. Parking lots, on the other hand, are technically private spaces for the use of authorized persons. A parking lot for an apartment house offers a good example of a space which residents might, on the one hand, consider their own and control or, on the other hand, might consider essentially a public space, with what happens there being "none of their business".

From its observations, the physical design team concluded that much of the space that should have been "semi-private", because it was adjacent to clearly private space, was in fact "public". Spaces such as sidewalks, residential streets and parking lots belonged to anyone anyone and everyone; residents did not take an active part in controlling who used them and for what purpose.

Lack of definition of interior spaces was one factor that contributed to this situation. The urban planners felt that visual definition of small neighborhood areas within North Asylum Hill, such as a residential block or part of a block, might well have helped residents feel that there was a physically defined geographic area of which they and their neighbors were a part. In the absence of such definition, they felt it was difficult for residents to feel their responsibility for the public, semi-public and semi-private spaces around them.

The heavy flow of vehicular and pedestrian traffic through the neighborhood was considered to be a major contributor to the situation. Having the streets and sidewalks outside of people's homes dominated by non-residents made the task of controlling these spaces virtually impossible. The spaces seemed to belong not to residents but to non-resident "outsiders".

The porosity of private spaces exacerbated the problem, according to the urban design specialists. There were a significant number of places in North Asylum Hill where a person could easily pass through backyards. Two features of the area contributed to this: 1) the lack of fencing along the railroad tracks; and 2) the presence of numerous voids, parking lots and vacant lots which allowed easy passage. Together, these conditions helped to make the private spaces in North Asylum Hill nearly as passable as the public ones. As a result, pedestrian traffic, particularly of students commuting to and from school, was not restricted to public ways. By observation, the urban design specialists concluded that taking shortcuts through private spaces was a routine phenomenon. The effect of this was to render even private spaces into public spaces not controlled by residents.

Summary. Taken together, these points added up to one simple conclusion; there were numerous features of the physical design in and around North Asylum Hill which undermined it as a residential neighborhood area. Three main problems can be cited. First, the area was surrounded by institutions and facilities that generated use of the neighborhood by non-residents. Second, a major public space in the middle of the neighborhood, the park, was the focus of activity considered undesirable and fear-producing by the majority of neighborhood residents. Finally, the absence of clear definition of the residential character of the area as a whole reduced the likelihood that residents would exercise control over public and semi-private spaces.

The Hartford Police Department

The analysis of the Hartford Police Department was based on extensive interviews with police officials, participant observation in police ac-

tivities, and extensive examination of the record data.

The size of the Hartford Police Department was larger than average for a city of its size, at 480 sworn officers.

The organization of the department was centralized. There were no police districts, and, hence, no district offices. Patrol units were assigned out of central headquarters to various segments of the city; assignments for patrol were rotated on a 60-day basis. Investigative units, specialized by type of crime, were separate from uniformed forces (traffic and patrol). All sworn positions were filled by civil service, a feature which restricted the chief's authority to appoint subordinate commanders.

The record keeping system within the Hartford Police Department in 1973 differed in several important ways from UCR standards in its accounting of arrests and crimes. Two were particularly important for this project.

First, UCR standards include unsuccessful attempts to break and enter a housing unit as "attempted burglaries" in burglary rates. By local convention, such cases were not included with burglaries in Hartford. In most cities, such events account for about 25 percent of recorded burglaries in police records. Second, a pursesnatch is considered a robbery by UCR standards if more force is used than necessary to relieve the victim of her purse. Again, by local convention, pursesnatches were almost never classified as robberies in Hartford.

Another feature of the record system was its lack of computerization. In 1973, the ability of the Hartford Police Department to retrieve data was minimal. Consistently, the extent to which the Hartford Police Department used information about patterns of crime and offenders to carry out its work was also minimal.

Citizen regard for police was generally high in Hartford. Standardized measures that had been used in other cities generally resulted in the Hartford police receiving ratings as high as, or higher than, other police departments. Particularly noteworthy was the fact that the black community regarded the Hartford police in a positive way, with substantial majorities giving positive ratings. Although, as in other cities, blacks were less favorable toward police than whites, the differences were generally less than had been found in other similar communities. Asylum Hill residents were very much like the city average in their regard for police.

Summary. Of the various characteristics of the police department, two stood out as being most important when thinking about a neighborhood crime control problem. First, the centralized nature of the police effort was not particularly well-suited to specialized responses in a sub-area within the city. Second, the lack of a good information and record keeping system created considerable barriers to on-going crime analysis and strategic deployment of patrol. On the other hand, Hartford police were well regarded by Hartford residents.

The Resident Population

The analysis of the resident population was based primarily on survey data, supplemented by 1970 U.S. Census data and conversations with informed sources in the community.

The size of the population was approximately 5000 people in 1973, as noted above.

The household types in North Asylum Hill were considered to be significant. Consistent with the type of housing available -- mostly small apartments -- over 60 percent of the housing units were rented. There

were two household types which dominated the North Asylum Hill population: single individuals under 40 living alone, and persons 65 or older living alone. Fewer than 20 percent of the households contained any minor children.

The socio-economic characteristics of the population were also notable. Both the education levels and income levels of residents of North Asylum Hill were higher than the average for the city of Hartford.

Ethnically, the neighborhood was heterogeneous, closely approximating the city of Hartford as a whole. In 1973, about 60 percent of the residents of North Asylum Hill were white, only 30 percent were black, and the balance were Spanish. The black and Spanish population had been increasing since 1970 in North Asylum Hill, as it had been throughout the city of Hartford.

The stability of the population can be viewed in two ways. On the one hand, consistent with the type of housing available in North Asylum Hill, the turnover rate was higher than the average in the city of Hartford. A third of North Asylum Hill residents had lived at their current address one year or less, compared with one in five for the city as a whole. On the other hand, there was a segment within the population that was relatively stable: homeowners and an older segment of the population that rented. Approximately 31 percent of this population had lived in North Asylum Hill for more than five years. These long-time residents were almost all white. The black population had arrived more recently.

The social cohesion of the neighborhood was considered to be a variable which, based on some past research, would affect crime. The physical design analysis identified some forces that might well undermine identity with, use of and caring for the area -- factors believed to affect neighborhood cohesion. Had the area had a strong common set of ties, such as a similar ethnic background, these factors might have been less significant.

However, in the context of a resident population heterogeneous as to age and racial/ethnic background, with a high rate of transiency, these factors could have a detrimental affect on the social cohesion of North Asylum Hill.

It was not surprising then that survey measures indicated the level of social cohesion was relatively low. North Asylum Hill residents were about as likely as not to consider the neighborhood "just a place to live" and more likely than average to say that neighborhood residents "go their own ways" rather than "help each other". Although about two in five residents said they knew at least five families in the area well enough to ask a favor, the same proportion knew fewer than three families that well. A number of residents said their neighborhood friends were moving away. These indicators consistently showed lower social cohesion in North Asylum Hill than elsewhere in Hartford. Taken together, they suggested that there were not strong interpersonal ties among the neighbors in North Asylum Hill.

On a formal level, the same kind of evidence was apparent. There was only one formal resident organization in the area concerned with neighborhood problems. In 1973, this organization had fewer than 40 active members.

Use of space by residents was considered to be an important dimension of the analysis. As an urban neighborhood, a prime virtue of which was its proximity to work and to downtown, walking might have been expected to be a common way to get around. However, it was found that North Asylum Hill residents were very unlikely to walk places in their neighborhood or to use public transportation. A number of indicators suggested that North Asylum Hill residents avoided their neighborhood streets.

Perceptions of the streets reflected the physical design analysis conclusions. Most residents thought there was relatively heavy pedestrian and vehicular traffic during the day, and almost half thought traffic remained

heavy after dark. Perhaps most important, North Asylum Hill residents were unlikely to say that they could easily recognize strangers using their streets.

Summary. Thus, four points could be said to stand out in the analysis of the resident population in North Asylum Hill. First, a relatively high proportion of the population was relatively transient, having recently arrived and expressing plans to leave soon. Second, it was a heterogeneous neighborhood with a growing minority population. Third, there was evidence of a low level of social cohesion, both formally and informally. Fourth, the public spaces were used at a low rate by residents, and residents generally found it difficult to distinguish non-residents using the streets from residents.

The Offender Population

The offender population and its strategies for committing crimes were analyzed in three ways. First, incident reports were carefully analyzed for characteristics of the offenders, where they were known, and the way in which crimes were carried out. Second, about 50 persons convicted of pursesnatch or robbery were interviewed about their style of operation as well as their other characteristics.* Third, knowledgeable police officials were interviewed about what they knew about the offender population and the favored modes of operation in Asylum Hill.

It was found that those committing residential burglary and robbery/pursesnatch in Asylum Hill were similar to offenders in other cities in several respects. As has often been found, the offenders were generally young, with three-quarters being under 25. Street crimes in Asylum Hill

*Burglary offenders were not interviewed. A similar project carried out in Boston in 1971 had included interviews with burglary offenders. It was concluded that information from the Hartford incident reports and police, combined with the results of the Boston interviews, would suffice to provide a picture of burglary offenders in Hartford.

were committed predominantly by black offenders against white victims, while those committing burglaries were approximately half white and half black.

About half the offenders in both categories were known drug users.

The timing of crimes was also fairly typical. Most burglaries took place during the day. Pursesnatches also took place during the day, though they were concentrated in the early evenings. Robberies took place in the early and late evenings.

A final point to be made, which again is not atypical, is that interviews with offenders suggested that most of their crimes were relatively unplanned. In essence, they wandered around looking for an opportunity.

There were, however, three ways in which the offenders in Asylum Hill were quite different from what one would normally find in other residential areas. First, 75 percent of known offenders in Asylum Hill were not residents of Asylum Hill. That is, the vast majority of crimes of concern to this project were being committed by outsiders. Second, although they were not residents, most offenders did not live far away. Seventy-five percent of known offenders lived within a mile of Asylum Hill and 90 percent lived within a mile and a half. Third, almost all crimes in Asylum Hill, both robbery and burglary, were committed on foot. This is not atypical for street crime, but it is very unusual for burglary. However, interviews suggested that the typical burglary involved breaking and entering, stealing and leaving the loot in a nearby drop place to be picked up later (in a basement of an apartment house, for example).

Summary. The important features of the offender population and its mode of operation identified in the analysis, then, include the facts that offenders lived nearby but not in Asylum Hill, that they operated on foot, and that they were opportunists. A standard procedure involved wandering or

hanging around in the neighborhood waiting for a good opportunity to commit a street crime or residential burglary.

Crime Rates and Patterns

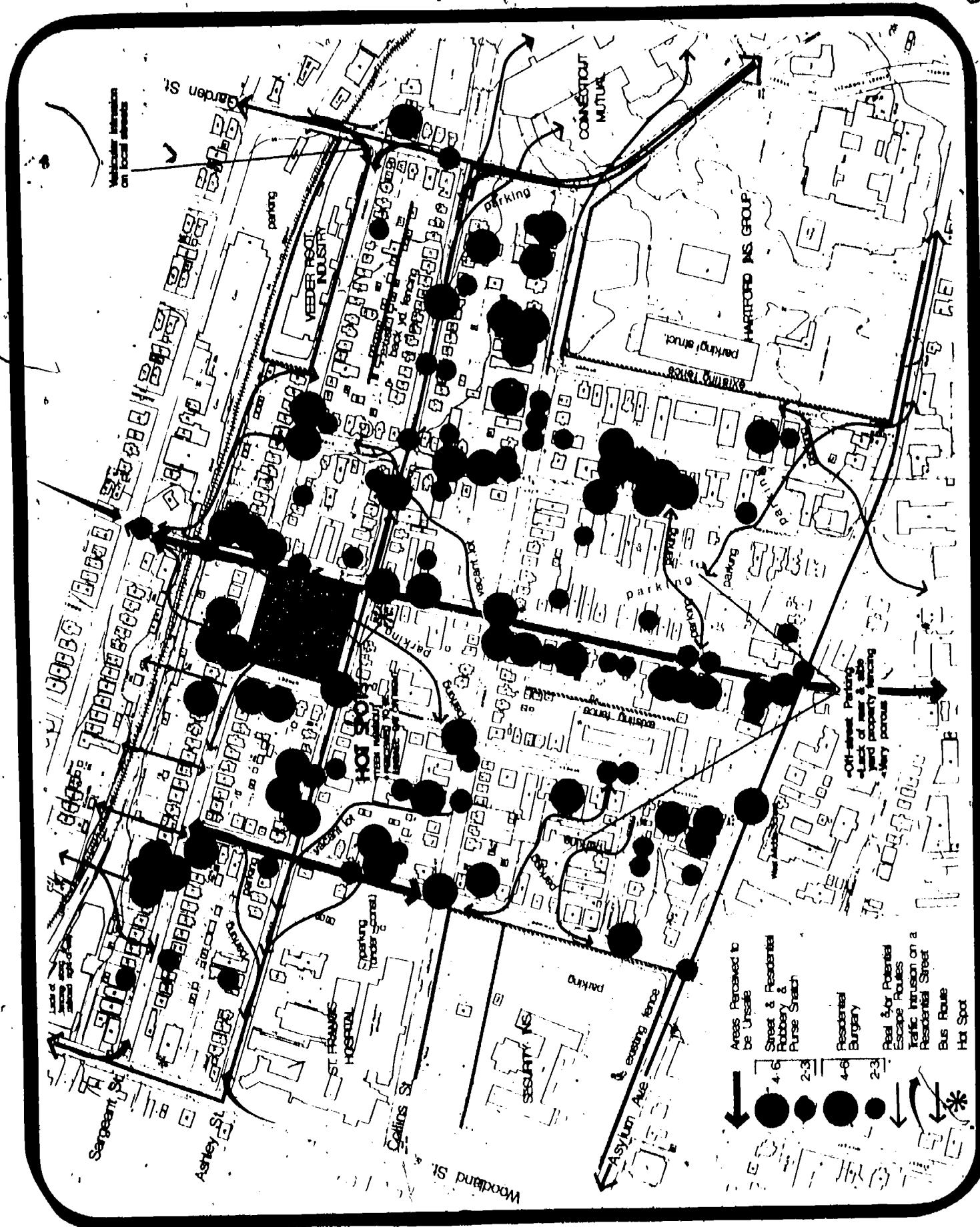
The analysis of the rates and patterns of crime in North Asylum Hill and throughout Hartford were carried out using both police records and victimization survey data (see Figure 3).

As derived from police records, the rate of burglary in Hartford as a whole was considerably higher than burglary rates in most other comparable cities. Hartford is an unusually small central city for a metropolitan area of its size. This means that low-density residential areas, where crime rates are traditionally lower, are suburbs of the city of Hartford, (whereas many cities have annexed such areas); hence, their lower crime rates are not included in the calculation of crime rates for the city. Even taking this fact into account, however, the burglary rates in Hartford would have to be considered high.

In 1973, the burglary rates in North Asylum Hill were slightly lower than the city-wide rates in Hartford. Nonetheless, with a rate of almost 8 per 100 households estimated from the victimization survey, and a rate 50 percent higher than that if attempted burglaries are included (as they would be according to UCR conventions), there was a significant amount of burglary in North Asylum Hill.

The rate of robbery/pursesnatch in North Asylum Hill in 1973 was higher than elsewhere in Hartford. The victimization survey estimated that residents were victimized at the rate of 2.7 per 100 persons in 1973, more than double the rate for the city as a whole. Moreover, this estimate constituted a serious underestimate of the actual rate of robbery/pursesnatch in the area. Because the area was used heavily by nonresidents, many of

Figure 3
PROBLEM MAP
North Asylum Hill Area



them were victims as well. Based on police incident data, it was estimated that about half of the victims of robbery/pursesnatch in North Asylum Hill were nonresidents of the area.

In addition, analysis of the street crime showed an interesting pattern which became important to the study team's conclusions about the crime problem. Typically, robberies and pursesnatches occur on or near main streets; crimes such as these on residential side streets are relatively rare in most areas. However, in North Asylum Hill, the majority of all street crimes occurred on residential side streets, not on main streets.

Thus, in 1973 street crime appeared to be proportionately more of a problem in North Asylum Hill than burglary, though the rates of both crimes were relatively high.*

Fear of Crime

At the time the problem analysis began for this project, not a great deal was known about fear of crime or its origins. It was thought that fear of crime, of course, was affected by the actual crime rate. In addition, it was thought that there might be other factors which contributed to the level of fear over and above the actual crime rate.

The term "fear of crime" is used loosely in the literature to cover a variety of perceptions and feelings. Numerous questions were included within the citizen survey that dealt with various aspects of "fear": the perceived likelihood of being a victim, perception of different crimes as a problem in the neighborhood, the amount of "worry" about different crimes. When these responses were compared with the responses elsewhere in Hartford, the following

*It should be noted, however, that by the time the program began to be implemented in 1975, burglary, too, had risen to levels above the city average.

conclusions emerge.

As the victimization data might lead one to expect, there was distinctively more concern about street crime than about burglary among residents of North Asylum Hill. Compared with the rest of Hartford, concern about burglary in North Asylum Hill was about average.*

Residents were also asked to rate the seriousness of a variety of possible problems in their neighborhood. Among those asked about were prostitution, drug use and drug sales, and teenagers hanging out in groups. Analysis of the responses on items related to fear of crime indicated that those people who saw prostitution, teenagers and loitering men as the most serious problems, were also most concerned about crime. This finding was important for two reasons. First, it suggested that citizen perceptions of crime, while clearly very much affected by the actual rate of crime, were also affected by neighborhood characteristics which did not necessarily affect the probability of victimization. Second, it reinforced a number of points in the neighborhood analysis by indicating that what was going on in the neighborhood streets, in public places, was producing fear in neighborhood residents. Thus, the analysis of fear, like many of the analyses described above, pointed at the public spaces and the use of space in North Asylum Hill as a key to the problem of crime and fear in the area.

Analysis of Factors Contributing to Criminal Opportunities

The general findings and conclusions outlined above were pulled together to produce an integrated analysis of the factors in North Asylum Hill which contributed to criminal opportunities and to fear of crime. It should be emphasized that in some cases the link between the area analysis and crime

*Like the experience with burglary victimization itself, concern about burglary increased in North Asylum Hill during the period 1973-1975 so that, by 1975, subjective concerns about burglary were equal to or above concerns about street crime in North Asylum Hill.

were hypotheses which had not been tested elsewhere, though the criminological literature discussed in the introduction guided and informed these hypotheses.

The analysis led to looking at a set of relationships between the four components of the environment in North Asylum Hill: the physical environment, the residents, the potential offender and the police.

The physical environment in North Asylum Hill was seen as the touchstone for the creation of criminal opportunities and fear in North Asylum Hill. The institutions surrounding North Asylum Hill drew vehicles and pedestrians through the neighborhood area. Almost all of the streets were more heavily used by through vehicular traffic than was appropriate. Likewise, pedestrians freely used not only the main streets but all of the side streets in North Asylum Hill. Moreover, because of the lack of definition of spaces and the presence of many voids, their paths were not restricted to public ways; outsiders dominated private spaces as well.

This situation created a perfect opportunity for potential offenders from outside of the neighborhood to wander the neighborhood, looking for a criminal opportunity. A person could go almost anywhere and not appear out of place or be questioned about his/her activities. As the urban design team said, "the spaces in North Asylum Hill belong to anyone and everyone."

As was noted, the significance of the physical environment cannot be separated from the characteristics of those who use it. Certainly part of the responsibility for the intrusion by outsiders on private and semi-private spaces in North Asylum Hill must be laid on the character of the resident population. Its transiency and lack of cohesiveness partly stemmed from its demographic characteristics. The physical environment did little to foster or encourage resident cohesion; indeed, it appeared to discourage cohesion. Not only were the streets and public spaces dominated by outsiders whose

activities were often fear-producing and who created a neighborhood which seemed alien to residents; in addition, the neighborhood lacked the physical definitions which would have increased the likelihood of neighborhood identification and a sense of "territoriality".

Residents have an important role to play in opportunity reduction. They can look out for one another. They can make it uncomfortable for would-be offenders to wander around neighborhoods looking for opportunities. In North Asylum Hill, however, residents did not play this role very effectively. They avoided public spaces and semi-private spaces which would have increased their opportunity for surveillance. There was little evidence that they had a sense that they could control what happened in their neighborhood. The interaction of the physical environment and the residents' characteristics was felt to contribute to this situation.

The physical environment also made the role of the police in crime prevention more difficult. One of the striking features of street crime in North Asylum Hill was its dispersal to residential streets rather than being concentrated on main streets. Police patrol and surveillance can be most effective if it can be targeted on a limited number of areas where crimes are most likely to occur. However, because offenders felt comfortable on all streets, and "worked" side streets even more than the main streets, the potential for police patrol and surveillance to effectively limit criminal opportunities was constrained.

There were other factors which contributed to criminal opportunities. If the neighborhood residents had been better organized, it might have affected the ability of residents to exercise control over their neighborhood. The fact that police officers were rotated every sixty days limited their ability to become familiar with residents' concerns and, more impor-

tantly, the details of the patterns of crimes in North Asylum Hill. The fact that offenders were likely to be more familiar with the area, including escape routes, than police was something less than ideal. Furthermore, although the police were well-regarded by the North Asylum Hill residents, there had been no particular effort to enlist citizen cooperation in crime prevention. The rate at which North Asylum Hill residents called police about crimes was only average in the city of Hartford. Perhaps there was room for improvement in this respect.

These issues, while important, appeared to be secondary within the total picture of criminal opportunity in the area. The fundamental problem was that the residential character of the neighborhood was undermined by the way in which it was being used by outsiders. The task of surveillance for residents and for police was difficult, perhaps impossible. The opportunities for residents to work together to take control of their own neighborhood were also undermined. According to the analysis, it was this problem that most needed to be addressed in order to affect crime in North Asylum Hill.

CHAPTER III

THE PROPOSED PROGRAM

Introduction

The history of intervention in on-going social processes by social scientists is not encouraging. Time after time, interventions have been shown to have no effects or only short-lived ones. Citizens have been mobilized for block watches or patrol efforts which have effects on neighborhood crime, until citizen interest wanes and the program dissolves. Particular patrol strategies by police are initiated, only to be abandoned when leadership changes. A head start program, a leadership training program for executives, psychotherapy, repeatedly have produced short-term changes for the better in individuals; but the gains are lost when the treatment ends if the individual returns to his/her previous situation. The lesson from the history of intervention is that fundamental changes in the structure of situations are required if change is to endure.

There were two critical assumptions behind the Hartford plan. First, if the changes were to endure, they could not depend on the imagination, enthusiasm or verve of a few individuals. Second, the problem was synergistic: that is, it was the interaction of all of the parts of the social and physical environment which created criminal opportunities. The effect of the way they were interacting was worse than the sum of the negative effects of each component individually. Consequently, to the extent that the program could affect all parts of the situation to make them mutually supportive, the benefits of the program would be multiplied; and they would endure because each component would be operating in a supportive environment.

The program was proposed within a set of constraints, some known in advance, some not. The physical changes had to be politically acceptable,

fundable, and able to be accomplished in a short time. The community components of the program would consist of what citizens in the North Asylum Hill area were able and willing to do. The police program was limited to what the Hartford Police Department was willing and able to do. The program designers were not the implementors. Their mode of influence had to be persuasion. Inevitably, any program they proposed could only be a set of strategies and goals; the details would have to be worked out with those responsible for approving them and carrying them out.

In this chapter, we will describe the model program that was proposed to the appropriate groups and agencies in Hartford. Although the physical design, police, and community organization programs are discussed separately, it should be understood that "the program" would only exist if all three were implemented in combination. It was designed to intervene in the processes identified in the analysis, which made North Asylum Hill a depersonalized neighborhood, one in which it was fairly easy for offenders to operate and in which resident control was discouraged. It was designed to restructure police operations to make them more effective at the neighborhood level and more supportive of citizen efforts. It was designed to be an integrated, enduring intervention in a process that was creating increasing burglary and street robbery in an urban residential area.

The Plan for Physical Design

The physical design program had four general goals: 1) to diminish the use of North Asylum Hill by non-residents, both in cars and on foot; 2) to structure and channel remaining through traffic onto a small number of selected streets; 3) to define the neighborhood spaces more clearly, both overall and for interior residential areas; and, thereby, 4) to increase residents' use of the neighborhood and their sense of control over what

happened there.

There were several constraints on the options available to the physical design team. First, the type of physical changes proposed had to be such that they could be implemented in a reasonably short time. Second, there were real limits on what the proposed changes could cost. Third, any set of specific changes proposed had to be ratified by both area residents and city officials. The time constraints almost necessarily limited the program to public places: streets, sidewalks and parks. An integrated program of changes on private property would have entailed a time-consuming process of persuasion and funding that would have extended well beyond the projected target date. The cost constraints meant that proposed changes had to be relatively simple. The constraints of political acceptability meant that the specific details regarding design and location of proposed changes had to be worked out through a process of negotiation and compromise.

There were five specific targets of the proposed physical design changes; vehicular traffic, pedestrian traffic, definition of the neighborhood area and interior spaces, open spaces, and "porous" private spaces.

Vehicular traffic commuting through the neighborhood was carried on three east-west streets and one north-south street. The physical design team wanted to reduce the number of through streets from four to one (an east-west street) or two (an east-west and a north-south street). The principal means proposed for doing this was blocking some streets at intersections, creating cul-de-sacs. These streets would no longer be through streets. In addition, they proposed treatments of a number of side streets which were designed to make them unattractive for use as shortcuts through the area. These treatments included creating cul-de-sacs, changing two-way streets to one-way streets, and creating "gateways" by simply narrowing

the entrance to a street to make it appear clearly residential rather than a through street.

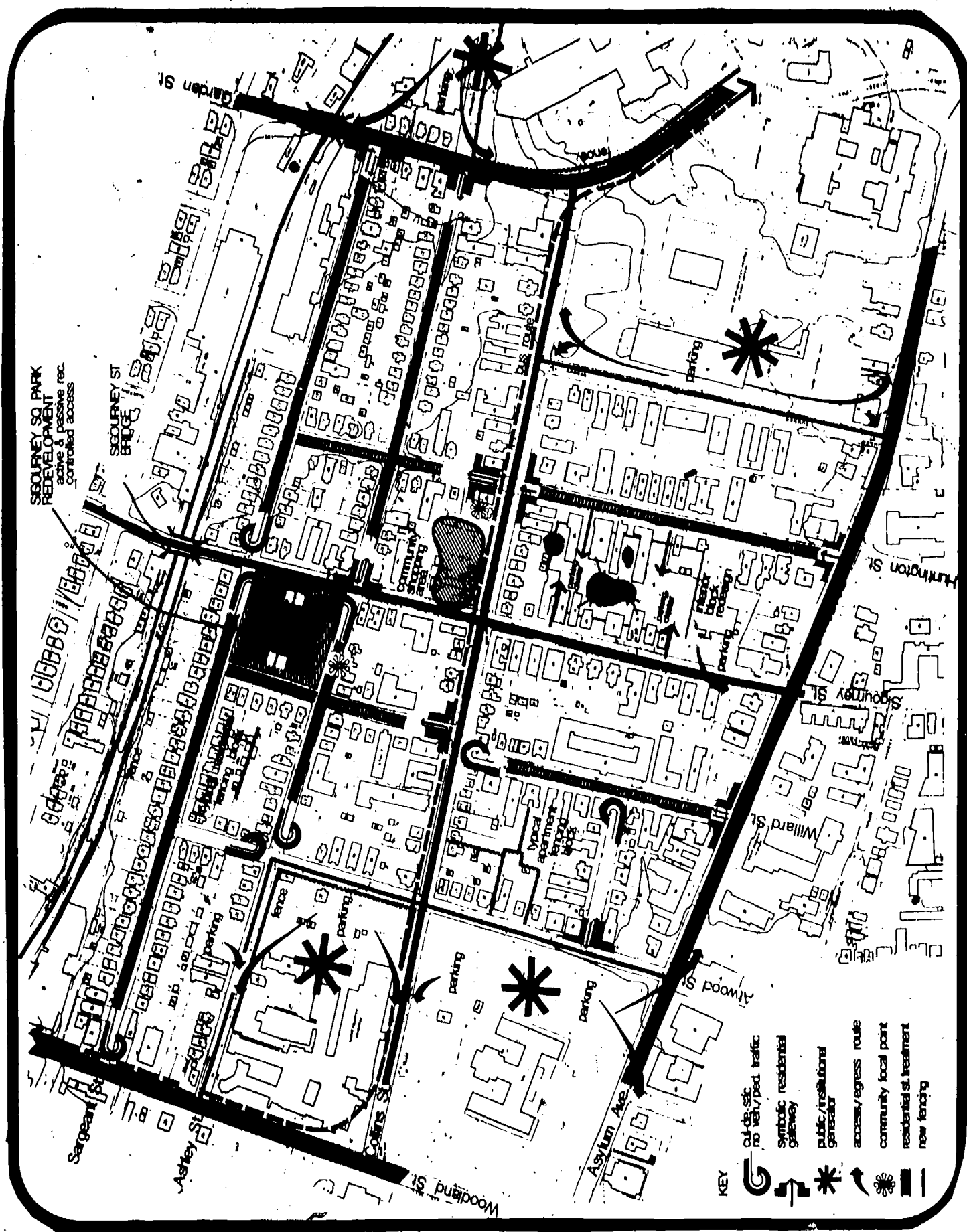
One east-west street had to be kept open to handle bus traffic (forcing outsiders from the north or south to go around the neighborhood) and directing all east-west through traffic onto a single street. However, there was some doubt about the political feasibility of such a plan. A compromise plan would keep the north-south street open as well. The overall goal was to define one or two "collector" streets as the only streets which would carry traffic through the neighborhood, thereby significantly reducing the traffic on most streets in North Asylum Hill and possibly reducing the total number of cars driving through the area as well (Figure 4).

Pedestrian traffic was seen as much more difficult to control. It is not difficult to design streets to discourage through vehicular traffic, while leaving them accessible to residents. It is very difficult to structure non-resident pedestrian traffic without creating impediments to residents' use of the neighborhood as well.

There was a bridge across railroad tracks which constituted the sole public access to North Asylum Hill from the north. This bridge was heavily used by students commuting to schools. Eliminating that bridge would have encouraged students to walk around the neighborhood. This change would have produced a marked reduction in non-resident pedestrian traffic in North Asylum Hill. However, it was decided at an early stage that removing the bridge was not politically feasible.

Alternative ways of structuring pedestrian traffic through the neighborhood were considered, including gates and barriers of other kinds. However, none of these approaches could accomplish their goals without causing undue inconvenience to neighborhood residents.

Figure 4
PHASE 1 AND 2 PLANS



The closing of Sargeant Street east of Sigourney Street and two or three other minor changes were not implemented.

It was concluded that there was no sure way to structure the paths of those walking through the neighborhood. There was some hope that the streets closed to vehicular traffic and defined by gateways would begin to appear to non-resident walkers as areas where they would not feel comfortable. This would be particularly likely to happen if the residents of those streets began to use their yards and streets more and began to assert control over those streets. However, an alternative outcome could be that streets with reduced vehicular traffic would be particularly attractive to pedestrians. There was no confidence that there was a way to control or structure pedestrian traffic in North Asylum Hill unless residents responded to reduced vehicular traffic on their streets by creating an environment in which outsiders felt less welcome.

Definition of spaces was a problem which the physical team attempted to deal with in two ways. Their first concern was that North Asylum Hill as a whole was not visually defined as a residential area. In particular, the transitions from the commercial streets bounding it into the residential area were not clear. The proposed solution was to create "entrance ways" on as many of the streets entering North Asylum Hill as possible. These entrance ways would consist of street narrowings with attractive landscaping, and would give a visual sign that land use was changing -- that one was entering a residential neighborhood.

The other problem of definition was that of interior spaces. Some blocks in North Asylum Hill are long ones, and the urban design team felt that these spaces were too large to promote resident identification with an area larger than that immediately around their homes. To address this problem, the urban design team proposed "mid-block treatments": breaking up the longer blocks by narrowing the streets, possibly putting an island in

the middle of the street, again with attractive landscaping. In this way, they hoped to create a number of subunits within North Asylum Hill.

Open spaces or voids were of three different types: a very important park in the middle of the neighborhood, a few vacant lots or lots where houses had been abandoned, and parking lots for apartment buildings and offices.

Essentially, there was nothing to be done about the parking lots since they were private property. The one proposal advanced was to encourage landlords to fence their parking lots, thereby decreasing the likelihood that people would pass through parking lots into residents' backyards and other private spaces. However, landlords could only be encouraged to do this; public funds could not be used for this purpose.

The vacant lots and abandoned buildings, which were relatively few in number, were also private property. The urban design team recommended that efforts be made to encourage the owners of these properties to upgrade them and, if possible, to help by encouraging private financing to restore buildings. However, again, these problems could not be solved by the direct use of public funds; so such efforts were not part of the program.

The park could be treated by the program. The urban design team particularly singled out the park as being important. The exact kind of changes could not be specified, because they would clearly have to be designed with resident cooperation and input. However, in general, the urban design team encouraged cleaning up the park and defining certain spaces within it for use by small children and elderly people. This would encourage residents of the neighborhood to regain control over the use of this important place as a public space.

The porosity of private spaces in North Asylum Hill was the final problem addressed by the urban design team. Again, solutions were limited by the fact that they had to be private solutions; public funds could not be used for private fencing. Simply communicating to landlords that increased fencing would be beneficial to the neighborhood as a whole was the only short-term proposal developed, with one exception. As previously noted, the only public entrance into North Asylum Hill from the north was a single bridge over the railroad tracks along the northern border of the area. However, the land along the tracks was unfenced. This allowed entrance into the neighborhood through backyards across the entire north border. The urban design team urged that negotiations be undertaken with the railroad company regarding the fencing of the entire length of the area.

In summary then, the physical design proposal included: creating cul-de-sacs, gateways and one-way streets to reroute vehicular traffic through the neighborhood to one or two collector streets; constructing entrance ways and midblock treatments to give visual definition to the entire area and to create smaller interior spaces; cleaning and structuring the park; negotiating with the railroad company for fencing along its tracks; and encouraging other private landowners to fence or improve their properties.

The Plan for the Police

The Hartford team thought that the police role in the reduction of criminal opportunities and of resident fear in North Asylum Hill could be strengthened in three main ways. First, the quality of information available to police could be improved. Because of geographically rotating assignments, officers on field patrol had only a limited opportunity to become familiar with any neighborhood area. Because police operations were centralized, there was not a good mechanism for collating and transmitting the

information which individual officers did have about a particular neighborhood area to those making decisions about strategy and priorities. In 1973, the Hartford Police Department's system for keeping records on crimes and offenders made retrieval of the information they contained difficult. This severely limited the use of record data in planning strategies and allocating resources.

Second, because decision making was carried out in central headquarters, there was little inclination or capacity for tailoring police strategies to the needs and problems of a particular neighborhood.

Third, although the police were well regarded by residents of North and South Asylum Hill, it was thought that strengthening relationships between the police and citizens might help the residents themselves play a more significant role in opportunity reduction. One way was for police to encourage and support both formal and informal efforts by residents to protect themselves and to control their neighborhood. In addition, by becoming familiar with resident concerns and responding to those concerns where appropriate, police might be able simultaneously to improve conditions that were producing fear and to increase further residents' sense of control.

The police program proposed was one that would deal with all of these problems: creation of a neighborhood team assigned to the Asylum Hill area. The proposal had four features that were considered essential for achieving the goals of the police component of the program:

- 1) Permanent geographic assignment of men to the area was one important feature. The most important reason for this was its potential to increase individual officers' knowledge of the neighborhood and its crime. It was thought that an additional benefit might be to increase the officers' commitment to solving the problems of the neighborhood.

2) Decentralized command of this team was another essential feature.

It was thought that for police responses to be tailored to the needs of the neighborhood, decisions had to be made at the neighborhood level. A very important benefit of this change would be improved access of decision makers to detailed information about the area. The supervisory personnel would have both experience in the area themselves and an improved ability to obtain information from individual police officers.

3) The development of a formal relationship between residents and police was also considered essential. This would not only create a mechanism for communicating resident concerns and priorities; it would also create some resident leverage to increase the accountability of police to residents. Of equal importance, such a mechanism would provide a way for police to learn about citizen ideas for reducing crime in the neighborhood area. It also would provide a way for police to enlist citizen cooperation in reporting problems and conditions that might warrant police intervention.

4) Finally, it was felt that the police would be more effective if they had better information about the patterns of crime in the area. In particular, the police needed to understand the role of the physical environment in producing criminal opportunities and in shaping their distribution. It was proposed that special procedures be established to provide this information to the neighborhood team in Asylum Hill.

Because of the similarity of the proposed police program to other experiments labeled "neighborhood team policing", it is worth noting two features often associated with team policing that were not part of the proposed model. First, neighborhood team police units sometimes have "full service responsibilities". They handle all police activities within their assigned area. However, the Asylum Hill area was not large enough to support a full

service team. Given the strength of the Police Department of the City of Hartford, the Asylum Hill share would be 20-25 men. A team of that size cannot afford to have very many specialists. Also, Hartford is small in area. People, including offenders, can move about it easily. Therefore, the city-wide scale would seem to be the most efficient and effective for specialized units. It was assumed, then, that city-wide investigative units, such as vice and burglary, would continue to service the Asylum Hill area as needed. However, it was hoped that the units would work closely with the team so that all police responses in the area would be integrated and consistent.

A second feature often associated with team policing is "participatory management". This was seen as an internal issue for the police department to evaluate for itself and was not, in itself, essential to meeting project goals. However, a good information flow within the unit serving Asylum Hill was considered to be desirable.

The above four features outline the proposal that was submitted to the Hartford Police Department for its consideration.

The Plan for Community Organization

Some form of community organization was needed in Asylum Hill for two reasons. First, physical changes could only be implemented if residents participated in the detailed planning of those changes and approved the changes proposed. Participation in such a process necessarily involves volunteers who are willing to spend the time and effort required to attend meetings and become informed. Formal voluntary organizations are the most usual and probably the most efficient mechanism for such a process.

In addition, a formal relationship between residents of the area and the police was proposed. While formal neighborhood organizations are not

necessary, one of the best ways to insure that resident needs and interests are fully represented is to work through formal organizations.

For these reasons, the first and basic objective of the program was to establish a formal organizational structure that could represent the residents of North Asylum Hill. At the time the program was begun, there was only one neighborhood organization. Its membership came from only a part of North Asylum Hill. The project team considered it essential that either this organization be expanded or new organizations created to provide a mechanism for participation for all segments of the resident population.

The criteria for these organizations were fairly straightforward: they needed to provide an opportunity for all residents to participate; they needed to be viable organizations that could stand on their own over time; they needed to be perceived as reasonably representative of the resident population as a whole; and they needed to have neighborhood problems in general, and crime in particular, among their major agenda items.

The goals for the community component of the program were as general as the outline above indicates. It was recognized at the outset that the project team could not control organizational decisions or the kinds of activities they initiated. It was hoped that the community organizations would initiate two general kinds of activities on their own. First, it was thought that they might undertake some activities that would formally involve residents in crime control. Second, it was hoped that they might develop activities which would promote interaction and cohesion among neighborhood residents. In addition, these groups were to be represented on a police advisory committee of some kind.

Conclusion

In the preceding sections, we have outlined the components of the program which was proposed for the North Asylum Hill area of Hartford. It is important to understand how the three components fit together to produce an integrated effort to control criminal opportunities and to reduce fear. It also is important to understand that it is a combination of the direct and indirect effects of the program changes that was expected to produce significant reductions in crime and fear.

The specific anticipated effects can be summarized by looking again at the set of relationships among the physical environment, the residents, potential offenders and the police.

The physical design changes had the direct goal of structuring and reducing vehicular traffic, making the residential streets more residential, better defining the neighborhood as residential, and making the neighborhood area more attractive. As a result of these changes, it was hoped that residents would be encouraged to use neighborhood spaces, that they would interact more with one another, and that they would begin to become more familiar with, and take more interest in, who used the neighborhood for what purpose. These changes, in turn, would lead to increased resident control over the neighborhood, particularly in the residential areas off the one or two through streets, which would produce more mutually protective behavior on the part of residents and make residential areas less attractive to potential offenders.

Potential offenders themselves might feel less comfortable on streets on which vehicular traffic had been significantly reduced. Vehicular traffic was thought to have created an impersonal atmosphere where outsiders could comfortably "hang around". The reduction in traffic, in combination with

an increased interest in street activities and in use of the streets by residents, was designed to discourage offenders from wandering the neighborhood streets.

The physical changes were also designed to help the police. To the extent that offender activity would be restricted to a smaller number of places, the less residential streets, the potential for police surveillance and intervention in crimes would be increased.

Thus, the goal of physical changes was not simply to reduce traffic. Rather, a complex set of consequences was expected to result from the simple changes which included strengthening resident relationships with one another, increasing their control in the neighborhood, discouraging offender behavior, and structuring criminal opportunities to make police intervention easier.

Similarly, the police program was designed to have several different kinds of effects. Certainly it was thought that increased familiarity with the neighborhood and the ability to respond uniquely to its problems might improve police ability to intercede in crime and to arrest offenders. In addition, it was thought that the geographic stability of officers would strengthen the informal relationships between police and residents, encouraging resident cooperation with police and the residents' sense of having an effective working relationship with police. It was also hoped that the relationship with residents would lead to some shift in police priorities, reflecting the needs and concerns of residents. For example, it had been found that residents feared what went on in the streets (prostitution and loitering). Police generally give lower priorities to such activities than to more "serious" crimes. If they learned from residents that these activities created a serious problem of fear, police could make an effort to control them, thus directly reducing fear.

Finally, the community organization program was essential in implementing the physical design and in establishing the formal relationship between residents and the team police unit. It was also hoped that these organizations would, on their own, initiate resident efforts, both formal and informal, to deal with crime in the area. Formal programs such as block watches might be established to discourage offenders from wandering the streets. Of even more importance, however, would be communicating to residents their potential day-to-day role in looking out for one another and in informing the police of suspicious events. Efforts by community organizations to increase interaction among residents and to make the neighborhood more attractive might also enhance the likelihood that residents would increasingly look out for one another.

In Hartford, as in any other city in which someone would attempt to implement such a program, the residents were going to decide what community organizations would do, and the physical changes emerged out of a political process. The task of the project team was to present the goals that it saw as desirable and the analysis on which those goals were based.

The above outlines of the program were presented to the appropriate constituencies in Hartford. There followed a period of negotiation, meetings and decision making. In the next chapter, Chapter IV, we describe the program implemented.

CHAPTER IV

IMPLEMENTING THE PROGRAM

Introduction

Implementation was a developmental process, not a single event, for all three program components. The model plan was presented to the Hartford community as a set of more or less specific program objectives together with the underlying rationale. Part of the implementation process for all three program components was to develop, in cooperation with residents and the public and private agencies concerned, acceptable means of reaching the objectives. There were, necessarily, some compromises and as a result, some changes in the plan.

The purpose of this chapter is to provide a good description of the program as actually implemented. This is necessary for two reasons. First, because there is only one experiment being evaluated, this description is the main basis on which readers will be able to reach conclusions about the general applicability of the Hartford program. Second, we must compare what was achieved with the proposed plan in order to assess the significance of the impacts of the program.

The Hartford Institute began preliminary discussions with city officials and neighborhood residents in the summer of 1974.

At that time, there was one organization in Asylum Hill composed of residents of one section of the area. Over a period of six months two more organizations, representing residents of other parts of Asylum Hill, were formed.

The initial agenda for community meetings was the feasibility of forming a Police Advisory Committee and the possible street changes. A Police

Advisory Committee was formed and it included representatives of the three major community groups. Over time, the groups initiated a number of programs, some crime-related, some not. All three groups were extant through the spring of 1977, although the level and kind of activity which they engaged in varied.

Early in 1975 the Hartford Police Department created a district which included Asylum Hill. Within the district, two teams were created, one of which was designated to serve Asylum Hill. The team had a stable assignment of men to the area, a high degree of interaction with citizens, and it gained a moderate amount of autonomy in decision making.

The physical design plan underwent a period of review during which a number of details were modified. Approval was a slow process for several reasons. It was the most radically innovative component. The logical connection between closing streets and crime reduction is a subtler one than that between police or citizen efforts and crime and, therefore, more difficult to communicate. The proposed street closings necessarily affected more people directly than the other two program components; so more people had to be consulted and convinced of the value of the changes.

Eventually a plan was approved which entailed eleven changes in the public streets in North Asylum Hill. Work began in June, 1976. Two key east-west streets were closed to through traffic. A number of other streets were narrowed at intersections; one was made one-way. One north-south street and one east-west street were left open to carry traffic not routed around the neighborhood. All street closings were complete by November, 1976. Some of the final landscaping was added in the spring of 1977.

Because the unique feature of the program was integration of physical design considerations into a multi-faceted program of opportunity reduction,

the program could only be said to be fully "in place" when the physical changes had been made. Although implementation of community, police and physical design program components are treated separately in the discussion that follows, it should be kept in mind that they are not independent entities. Rather, they are interdependent parts of a whole and have consistently been thought of that way.

Implementing The Community Organization Program

Introduction

This discussion begins with the community organization component of the program because, chronologically, the first step of implementation was to begin to involve the area residents. The two immediate goals of the community organization effort were to include area residents in the planning and implementation of the physical changes and to establish a formal relationship between residents and police. In order to do this effectively, it was evident that it was necessary either to expand the one existing residents' organization or to create new ones. The necessary characteristics of these organizations included: 1) serving the entire geographic area of North Asylum Hill; 2) representing the range of needs and concerns of neighborhood residents; 3) having crime as a significant agenda item; and 4) having enough stability to permit participation of residents over an extended period of time.

Although it was understood that community organizations would define their own priorities and activities, it was hoped that they would contribute directly to the achievement of three general program goals: involving residents directly in the control of crime in their neighborhoods; addressing neighborhood problems in a way that would make the area more attractive and less fear producing; and encouraging interaction among residents as a way of strengthening cohesion and mutual concern.

Establishing the Organization

In the fall of 1974, when the Hartford Institute first began the process of presenting the results of the analysis (described in Chapter II) to the community, the only existing resident organization in Asylum Hill was the Sigourney Square Civic Association (SSCA). It had approximately 50

member households, mainly white, middle-aged and older home owners, long-time residents of the area in the northern half of North Asylum Hill. The goals of the organization at that time were diffuse. Many of its activities were social.

Institute staff, the project's urban design team, and the Hartford police officer who was to command the neighborhood's police team met with SSCA members to outline the problem analysis and the kinds of solutions the project team thought would be helpful. The membership almost immediately responded to the project in a positive way. Early in 1975 a committee to work with the police was established along with a physical design committee, as a formal means of participating in the project. SSCA consistently was an active and important participant in the implementation of the project from then on.

The area served by SSCA represented only half of the North Asylum Hill area. Therefore, it was necessary to stimulate the formation of a group to represent the residents in the remainder of North Asylum Hill. A group of about two dozen interested residents was identified. This was a rather different group from the one involved in SSCA. They were primarily young professionals, renters, who had chosen to live in Asylum Hill. They had some ideological commitment to the value of a city and to life in an urban environment. They represented not only a different geographic area but also a different segment of the North Asylum Hill community.

A series of discussions was conducted with this group in late 1974 and early 1975, similar to those held with SSCA. These meetings resulted in the formal establishment of Central Asylum Hill Association (CAHA). This group too established police and physical design committees to facilitate formal

participation in the project.

A third civic association; Western Hill Organization (WHO) grew out of an independent effort of the Hartford Institute to encourage a street observer program. In 1975, several property owners in Asylum Hill had suggested to the Hartford Institute that some such program might be useful. The idea was supported by the police. In the spring of 1975, some two dozen volunteers expressed interest in participating. Institute staff suggested that these volunteers and their neighbors form a civic association to participate in a broader way in affecting neighborhood problems. By the spring of 1975, WHO was formally established.

This again was rather a different organization. Geographically, the majority of members lived just south of Asylum Avenue. They tended to be older renters, long-time residents who had an investment in staying in the area and making it a better place to live. The social benefits of participating in a formal organization were also of importance to a considerable number of members.

Because SSCA and CAHA were both involved in building a relationship with the police through a special committee, it made sense to all involved to combine the efforts of the two organizations. In late spring of 1975 the Asylum Hill Police Advisory Committee (AH/PAC) was created with representatives from each organization. Representatives from WHO were added when it became formally organized.

Thus, by the end of the spring in 1975, there were three organizations representing Asylum Hill residents, each of which had representatives on a police advisory committee. The two organizations in North Asylum Hill were formally involved in the planning and implementation of the physical design program.

Organization Activities

Participation in the planning and implementation of the physical changes was the first issue brought to the community organizations. Their participation was made critical by the fact that the funding for the physical design changes had to come from the city. Documentation of majority resident support for the physical program was required by the City Council prior to authorizing the changes.

The community organization meetings served as a forum for presenting and discussing the suggested physical design changes. Not only did the membership become informed in this way, but the organizations also hosted open meetings attended by other residents and interested non-residents which were an essential part of the ratification process.

The organizations were more than simply passive vehicles for the exchange of ideas. The leadership of these organizations, particularly SSCA and CAHA, took initiative in a number of ways to help ensure the implementation of the physical design program. They attended meetings of the City Council and other public forums. CAHA undertook a survey of residents to help document the interest of residents in the program. Altogether, the contribution of these organizations was not simply that the majority of their members voted in favor of implementing the program; they also took an active role in pushing the City Council and others to act on it.

Furthermore, once a program had been approved, a monitoring committee was established to oversee construction and other aspects of the physical design changes. Needless to say, that committee included significant representation from the three area community organizations.

The establishment of the AH/PAC provided one vehicle whereby residents could relate directly to police. This group, as previously noted, was

established in the spring of 1975. It met regularly with police leaders in the area, sometimes bi-weekly and sometimes monthly. Thus, the two essential activities for the community organization component of the program were fully implemented.

It was hoped that the community organizations would undertake activities which would encourage resident crime prevention and strengthen the neighborhood. It is difficult to apply strict criteria to determine the extent to which this occurred. There were, however, a number of activities initiated by community organizations that were generally supportive of project goals.

Perhaps the most ambitious continuing activity of this sort was the Street Observer Program, which had served as the basis for the establishment of WHO and which was adopted by SSCA in 1976. The volunteer street observers from both organizations were trained by Asylum Hill police in such subjects as the use of CB radios and the detection and reporting of suspicious activities and crimes in progress. Observers worked during the spring, summer and early fall months, Monday through Friday, from six to eight in the evening. The program was terminated for the winter months of each year because of the reluctance of volunteers to be outside during the cold, dark winter evenings.

Observers were assigned on a per-block basis and provided with a CB radio or a walkie-talkie with which to relay calls about suspected criminal activity to a base station. The base station was located in the Asylum Hill Neighborhood Police Field Office and staffed by residents volunteers. Calls for service were relayed by the base station to a specially assigned area patrolman. The WHO program had about two dozen volunteers in 1975 and 40 volunteers in 1976; 50 SSCA members participated in the program in 1976. In the spring of 1977, about 40 WHO members and 70 SSCA members volunteered for

training.

Another program directly aimed at crime prevention was the Burglary Prevention Program initiated by CAHA in 1977. The purpose of the program was to reduce opportunity for residential burglary and to increase general awareness of citizen crime prevention. Twelve volunteers trained by Asylum Hill police and supervised by CAHA members conducted a door-to-door campaign with Operation Identification Engravers and information about home security. Engravers and Operation Identification stickers were supplied by the Hartford Police Department.

Turning to activities of a more general nature, all three groups held periodic social events (such as block parties) to which they invited police team members and their families, as well as residents of the area who did not belong to the organization.

The number and type of other activities of the organizations varied. For example, SSCA and WHO generally concentrated on problems specific to their areas, such as WHO's Transiency Reduction Program and SSCA's Redevelopment Program for Sigourney Square Park. CAHA was interested in more general problems, as when its members prepared draft legislation on mandatory sentencing and legalization of prostitution. SSCA and CAHA engaged in a larger number and wider variety of projects than did WHO. CAHA's projects tended to be relatively short-term ones, whereas SSCA and WHO had a number of continuing projects. One of the most important of these may turn out to be the Neighborhood Housing Services program, which was just getting underway at the end of the evaluation period. SSCA has played a major role in working with the Hartford Institute and other interested persons in Hartford to arrange funding for improving the housing stock in the North Asylum Hill area. Many observers consider this to be a critical part of strengthening the neighbor-

hood as a whole, although it will take some time for the results of this effort to have a neighborhood-wide impact.

The variety of activities described above is what one would expect of resident organizations. The differences in emphasis reflected differences in the needs and interests of the people who joined the organizations. Nevertheless, it is clear that each of the organizations in its own way initiated and carried out activities that were supportive of the general program goals.

Characteristics of the Organizations

One of the initial goals was to ensure that all areas within North Asylum Hill were represented by a community organization. Clearly, this objective was achieved. Second, it was considered essential that the community organizations formed had neighborhood problems in general, and crime in particular, as the main focus of their agenda. Although the emphasis in the organizations varied, each of the three organizations discussed met these criteria as well. A third goal was that the organizations be viable and enduring, providing a continuing mechanism for resident participation in neighborhood decision making. Each of the three organizations drafted and approved by-laws and were incorporated as civic associations under Connecticut state law. All had regular monthly meetings of the general membership throughout this evaluation period, with more frequent meetings by sub-committees. With the possible exception of CAHA, whose membership has consistently been the smallest, all three organizations seemed to be stable and viable at the end of the evaluation period.

The final goal for these organizations was that they represent the range of area resident interests. Those interested in joining a neighborhood group are always a small proportion of the total population. The people who

have the most interest and investment in the issues being addressed by an organization will, of course, be those most likely to join and be active. The three organizations were seen by city officials as sufficiently representative that a vote of those attending meetings was accepted as representing the sentiment of the resident population. However, in all three organizations, but particularly CAHA and SSCA, minority residents were under-represented. Apartment dwellers were also under-represented, particularly in SSCA.

Specifically, SSCA membership increased from 50 households in 1974 to slightly over 100 in 1977; about 20 of the latter were black. Although the residents were nearly 50 percent black, this did represent a considerable increase in the minority membership over 1974. However, despite continuing efforts to recruit more members from these groups, Hispanics and apartment dwellers continued to be under-represented.

CAHA's membership increased from an original dozen to 40 in 1977, with the majority being young apartment dwellers. Although close to half of the residents of the area served by CAHA were black, efforts to recruit minority members produced no stable black membership.

WHO membership consisted mainly of middle-aged and older apartment dwellers. The original 30 members grew to about 50, virtually all of them white. Since the area served by WHO had only a very small minority population, its lack of minority membership was less significant.

It is difficult to assess the significance of this issue. The fact that many black and Spanish residents were newcomers to the area, and tended to be young, undoubtedly contributed to the fact that they were less likely to join a group working on neighborhood problems. On the other hand, the relatively low rate of participation by the black and Spanish residents, who

constitute more than half of the population, must be viewed as a significant limitation of the community organization program. If it were resolved, it would probably increase the ability of the organizations to work positive changes in the area.

In conclusion, the implementation of the community organization program was very much as was originally outlined: the basic goal of establishing representative organizations which would participate in the physical design changes and relate to the police were achieved. In addition, the organizations undertook a number of activities which were supportive of program goals; and they were viable organizations that continued to work on neighborhood community problems throughout the evaluation year and beyond.

Implementing the Police Program

Introduction

As described in Chapter III, there were four main components of the model plan proposed for police. First, there should be geographic stability of the assignment of police officers serving the area. Second, decisions about tactics, policies and priorities should be made at the neighborhood level. Third, there should be mechanisms developed to strengthen the relationships between police officers and neighborhood residents. Fourth, police should have good information about the patterns of crime and the role the physical environment plays in creating opportunities for crime. The extent to which each of these goals was achieved during the implementation will be the main topic of this section. Other features of the implementation that were important in understanding the police role in opportunity reduction in Asylum Hill will also be discussed. In addition, because full service responsibilities and participatory management are often goals for similar police programs, the extent to which these were or were not part of this experiment will be described.

The Main Components of the Program

In January, 1975, the Hartford Police Department issued the order dividing the city into five police districts. As project planners had recommended, District 5, which included the Asylum Hill and Clay Hill/South Arsenal areas, was divided into two separate teams, with no increase in manpower over the city average. The teams consisted of officers representative of the department in capability, educational background, and commitment, rather than the "cream of the crop". A group of 59 men was assigned to District 5 as follows: one district commander, two team commanders (one to head each team), six sergeants (evenly divided between the two teams), and

55 uniformed patrol officers (about 25 per team). Each team established a field office in the area which it served.

Geographic stability of assignment was established by this order.

Except for attrition, the same officers served in the Asylum Hill area from early 1975 when the team was established through the evaluation period.

There was some change in leadership, however. The district commander was promoted and left District 5 and the team leader in Asylum Hill changed in 1976.

One other aspect of geographic stability should be discussed at this time. One idea behind geographic stability is that members of the team would respond to most calls for service within their team area. However, in 1975, approximately 20 percent of all calls for service in District 5 were assigned to non-district units, and District 5 personnel found that approximately 35 percent of the calls to which they were dispatched were outside the district.

Several reasons may be cited for these rather high "crossover" rates. Although District 5 ranked fourth in population served, it ranked first among the five districts in calls for service in 1975. District 5 is centrally located, with three of the other four districts bordering it. Therefore, it is the most convenient district to call when there is an overload in another district. Finally, all calls for service are relayed through the central communications division at central headquarters. Clearly, the central problem was that dispatchers initially had not adjusted to the district concept. Many of the "crossovers" were for non-emergency calls.

Some steps were taken to try to reduce "crossover" rate. District supervisors were encouraged to keep their cars within their districts and

Residents and police discussed policies for handling this problem at the AH/PAC meeting.

Thus, AH/PAC appears to have served its purpose as a mechanism for establishing communication between resident leaders and police leaders. Indeed, more than with some other police-community relations groups, a process was established in Asylum Hill whereby residents could in fact affect police decisions and priorities.

It should be noted that most members of the police team were not involved in AH/PAC meetings. In fact, only ten of the twenty-four men surveyed in 1977 who worked in Asylum Hill said they felt they knew about what the Police Advisory Committee did. However, there were numerous other ways in which the Asylum Hill police team interacted with residents.

For example, in 1976 the team commander began to attend community organization meetings, as well as AH/PAC meetings. In addition, he occasionally asked patrol officers to attend these meetings, though this occurred infrequently.

There were several examples of the police supporting activities of the resident community organizations. They participated extensively in the block watch program by training volunteers and providing a location for the base station where calls could be received. When CAHA initiated its door-to-door campaign to increase physical security and encourage the identification of valuable objects, again the police supplied training and materials needed to carry out the program.

Finally, there were numerous instances of more informal constructive interactions between police and residents. Businessmen interviewed cited their pleasure at the fact that patrolling police officers frequently stopped by. Community residents held meetings and pot-luck dinners to which police

were even authorized to countermand orders to send their cars out of the district on non-emergencies. The problem was discussed with dispatchers and they were encouraged to maintain district integrity. Nonetheless, the problem was not solved. In 1977, approximately 30 percent of District 5 calls were handled by officers from other districts; the crossover rate from District 5 to other districts was 27 percent.

Decentralized command was an essential concept of the area team. However, the tradition of centralized command, reinforced by the retention of centralized operation of specialized units in dispatching, made for early difficulties in realizing this program goal. Even routine decisions were checked with the leadership at central headquarters prior to implementation.

When this pattern became apparent, the Hartford Institute initiated a series of discussions with headquarters personnel and Asylum Hill team leaders. A basic problem was that there never had been a written authorization for the team leaders to act autonomously. However, the district commander and team commanders developed an operations guide defining a workable scope of authority which was approved by the central command. Over time, these guidelines were implemented by the team command structure in Asylum Hill. By 1976, it could be said that the Asylum Hill team had a great deal of latitude and autonomy in making decisions about policies and priorities within the Asylum Hill area.

The relationship with citizens was focused on the Asylum Hill Police Advisory Committee (AH/PAC), which consisted of representatives from the three community organizations in Asylum Hill. As described in the previous section, this organization was established in the spring of 1975. It met bi-monthly throughout the duration of the experiment. Meetings were attended regularly by the district and team commanders.

Although initially the group served as a vehicle for citizens to voice vague and general concerns about crime, over time, as mutual understanding grew, the group became more constructive. The basic fact which police had to communicate to residents was their limited resources. In order to do more of one thing, they had to do less of another. The police, on their side, had to hear that the priorities of citizens and the things that concerned them were not always the things that were of highest concern to the police department.

AH/PAC was primarily an area for discussion and communication between the organized groups and the police. At one point the group did initiate a program of distribution of freon horns. However, this program was not considered successful by most participants. Future direct action activities were undertaken by the individual community organizations rather than by AH/PAC.

Several examples of police responses to the AH/PAC could be noted as examples of the significance of this mechanism. A major concern of neighborhood residents was the prostitution problem, which brought many undesirable people into the neighborhood. In the summer of 1976, the police launched an aggressive campaign against prostitution in the area, which received widespread publicity throughout the city. Another continuing concern was Sigourney Square Park, the park in the center of the neighborhood. As a result of the concerns expressed in the AH/PAC, police patrolled the park on foot as frequently as possible. They also made an effort, both in the park and elsewhere, to disperse groups of drinking men which were of concern to residents. Finally, when the physical changes were implemented, problems arose about the extent to which police should strictly enforce parking regulations and violations of the street barriers and one-way street signs.

team members were invited. In 1977, 22 of the 24 Asylum Hill officers surveyed said that they had attended some community activities during the year. Interviews with residents produced anecdotes of individual officers going out of their way to be helpful to individual residents. Thus, there is plentiful evidence that an important program goal, that of strengthening relationships between the citizens and the police, was achieved.

Special training in crime patterns and the physical environment was the final goal of the proposed program. To accomplish this, almost weekly meetings were held between Hartford Institute staff and the leadership of the Asylum Hill team. Crime patterns were mapped by Institute staff, and the physical team's analysis of the role of the environment in criminal opportunities was reviewed thoroughly. There can be little doubt that this objective was achieved for the leadership of the team.

However, it is equally clear that the program was not successful in getting these concepts to most of the men on the police team. In particular, patrol officers never understood the purpose and value of the street changes proposed. They were only negative about them. In the 1977 survey, 17 out of the 24 officers said that they thought the street changes were "not a good idea"; the other 7 were "not sure". Interviews conducted during the monitoring of police operations indicated little understanding on the part of patrol officers of the relationship between the proposed physical changes and crime. They saw the street changes as an interference. In fact, they patrolled closed streets less often than other streets in the neighborhood.

There was no real formal or informal attempt to explain the reasons for the street changes to the police officers. The relationships between the street changes and crime was not self-evident. One could speculate, that non-police approaches to crime control need to be presented with special

care to police officers, if they care to be accepted; but that is speculation. The fact is that most police officers did not like the street changes.

Nonetheless, the police may well have benefitted from knowledge of the physical environment or from the street changes themselves. For short periods during the experimental year, special burglary and robbery squads were established by police. These squads did map the patterns of crime and attempted to deploy their resources strategically to reduce opportunities. Almost certainly, the officers on the team were more familiar with the physical environment and escape routes than was the case when a city-wide force was rotating patrol of Asylum Hill. Moreover, even the officers' avoidance of the closed streets inadvertently produced the effect anticipated by the program designers: that police resources would be concentrated on main streets.

A final word should be said about crime information. The lack of a good information retrieval system in Hartford was noted as a problem. During most of the experiment, the Hartford Institute assigned a staff person to tabulate crimes and other data in Asylum Hill. These were presented to the leadership in the weekly meeting. In addition, the Hartford Police Department began major improvements in its computerized record system in 1975. However, the system only became fully operational near the end of the experimental period.

In conclusion, there was clearly geographic stability of assignment of men, though more calls for service than was desired were handled by out-of-district officers. The team clearly achieved decentralized command. It established an unusually strong set of relationships with residents in the area. Finally, the concept of the role of physical design in the reduction of crime was successfully conveyed to police leaders, but not to the average

patrol officer.

Other Significant Elements of the Police Program

There are three additional issues that need to be discussed to understand the team police program in Asylum Hill: participatory management, full service, and a reduction of manpower in the Hartford Police Department.

Participatory management was not specifically proposed by the Hartford project. However, because it is commonly a part "team policing", it should be discussed.

Stimulated by a grant from LEAA, several "retreats" were held in the spring of 1976 as a means, among other things, of relaxing the traditional command structure. Before that, there had been efforts to have team meetings to discuss policies and priorities. However, team meetings had to be held on "overtime", since only a minority of officers were on any given shift. There was a lack of resources to pay for overtime. Consequently, during the course of the two and a half years the team was in place, there were fewer than six full team meetings.

From time to time there were efforts by the team commander to involve men in decision making and to increase communication between team leadership and patrol officers. During 1976, the team leader asked patrol officers to send him suggestions for innovative police activities. As a result, a two-man anti-burglary squad was established in the fall of 1976 and a two-man anti-robbery squad was established during the Christmas season, when robbery and pursesnatch were most common. For a period of time the commander also rode with patrol officers in their cars in order to promote more informal communication.

These efforts were undoubtedly all helpful. However, for the most part, they were short-lived. Police questionnaire data suggest that over

the period of the experiment men did come to see themselves as much more of a team with its own identity. However, their participation in decision making remained minimal.

Full service is another characteristic often incorporated into a team police program. The project did not recommend full service for two reasons. First, there were effective city-wide units for such special activities as burglary investigations and vice. Second, it did not seem that the teams were large enough to support specialized services. As we noted above, the Asylum Hill team did in fact initiate special efforts against prostitution, burglary and robbery. For the most part, however, the model was for the team to attempt to stay informed of activities of the centralized investigative units in its area.

The overall reduction in police resources is a final topic that needs to be discussed here. There were two related issues in the relationship between the police department and the Hartford city government which affected the experiment of Asylum Hill. First, starting in 1975, there was a protracted negotiation regarding police wages. By 1976, the matter had still not been resolved, and police officers throughout the city were resorting to a variety of tactics, including strict ticketing for traffic violations and a reduction in crime reports filed, as an expression of their aggravation. Second, the City Council ordered a reduction in the police budget during the same period. This eventually led to a reduction in manpower and an inability to replace worn-out equipment.

Although the first of these events had some bearing on the police team in Asylum Hill, the most important effect was caused by the budget cut and reduction in manpower and equipment. The already relatively small team was reduced from 25 to 20 men. Working patrol cars were also in short supply

from time to time. The effect of the reduction in men was to reduce the flexibility of the team commander to institute special patrols and assignments. The short-lived anti-burglary and anti-robbery squads were early casualties. In addition, the ability to assign a special foot patrol to the park and other places where they were desired by citizens was reduced or eliminated.

In the judgement of the police monitor, the Asylum Hill Police Team may well have been smaller than was desirable in the first place. In order to fully realize the advantages of a program such as this, a police unit must have the flexibility to initiate new patrols or activities in response to resident concerns or a particular situation in the neighborhood. Even at full strength, the Asylum Hill Team had little excess capacity beyond responding to calls for service and beyond performing functions that were considered essential. When the team was reduced further, the capability for special assignments was almost eliminated. The problem was exacerbated for the team commander by elements of the police contract in Hartford which restricted his ability to allocate resources as he wanted. In particular, he was restricted to two-man cars and limited in the extent to which he could change an officer's schedule around to provide coverage in the way he saw as optimal.

The issues discussed above are good examples of the way reality impinges on an experimental program. None of the problems was unique to the Hartford situation. However, together the problems certainly had an effect on the role police were able to play in reducing criminal opportunities in Asylum Hill.

Implementing the Physical Design Program

As stated in Chapter III, the goals of the physical design program were to: 1) reduce vehicular traffic through the neighborhood and structure the remaining traffic mainly onto two streets; 2) restrict pedestrian traffic through the neighborhood and structure remaining traffic; 3) define the boundaries of the residential area and define smaller sub-areas within North Asylum Hill; 4) structure public spaces, particularly the park; and 5) reduce the porosity of private spaces to discourage their public use. In this section we will discuss the efforts implemented to achieve each of these objectives.

Vehicular Traffic

The heart of the physical design plan was to change the use of public streets by vehicles travelling through the neighborhood. In early thinking about these changes, the urban design team had hoped to close the main north-south street through the neighborhood as well as all but one east-west street. It quickly became clear that this was not feasible; too many people considered the north-south street to be essential. As a result, the basic plan presented to the community for preliminary discussion proposed that one north-south street and one east-west street be kept open for through traffic, but that the other east-west streets, and the side streets throughout the neighborhood, be treated so as to discourage their use by non-residents.

The two main strategies for dealing with streets were blocking streets to create cul-de-sacs, completely closing the street to all but emergency and service vehicles, and narrowing streets to create attractively landscaped gateways, which would signal the entrance to residential streets. In conjunction with the latter, the creation of some one-way streets was proposed to reduce through traffic. An example of how such a plan might look was

drawn up by the physical design team and it became the basis for a series of meetings and discussions.

The process of approval and implementation of this plan proved to be a lengthy one. When the project was conceived in 1973, it was hoped that private funding would be available for physical design changes. In fact, in 1975, it became apparent that public funding was the only way to achieve implementation of the program. This required appropriation of funds by the Hartford City Council, which in turn wanted documented evidence of resident support before approving the program.

A series of community meetings ensued at which both the general principles and the details of the proposed street changes were discussed. Most of the opposition came from several businessmen operating stores in North Asylum Hill who were concerned that restricted traffic would adversely affect their business. Eventually, a majority of residents attending community meetings endorsed a modified version of the program; and the City Council voted to fund the changes through a combination of Community Development funds with CETA funds being used for the labor for construction,

Even after this approval, further modifications were necessary. A factory in one corner of Asylum Hill, which originally had agreed to permit a street closing near its property, reversed its decision and forced the elimination of one cul-de-sac. The area businessmen brought a suit against the City Council. The suit was settled out of court, but the pressure exerted by their efforts led to the elimination of one street closing and moving another several yards away from its proposed site. In addition, as residents and leaders worked with the urban design team on the details of the final physical design, it was decided that two or three other street closings could be eliminated, making internal transit easier for residents without affecting

the overall design.

One final feature of the physical design changes should be noted. Because of the experimental nature of the plan and because of continued uncertainty of many area residents, businessmen and city officials about its effectiveness, it was agreed that all street treatments constructed would be temporary. The treatments had to be designed, and construction materials chosen, so that they could be dismantled fairly easily if a decision to end the experiment seemed justified.

Construction began in June of 1976, using CETA personnel under the supervision of the Department of Public Works. It was expected that work would be completed by the end of the summer. However, after several months, little progress had been made, primarily due to the lack of experience of the workers. Hartford DPW personnel completed the work, rebuilding sites where it was judged necessary. Construction work was effectively completed in November, 1976.

In all, 11 street changes were constructed: there were four cul-de-sacs, preventing through-passage of all but emergency vehicles, and seven gateways. One street was made one-way. This design left only two through streets in North Asylum Hill, Sigourney Street running north and south and Collins Street running east and west. Final landscaping was completed in the spring of 1977.

Control of Pedestrian Flow

The only proposal the urban design team suggested which would have directly affected the overall amount of pedestrian traffic through the neighborhood was to close the Sigourney Street Bridge. As noted previously, it was concluded at a very early point that such a change was not feasible. There was no feasible way to directly retard pedestrian traffic by outsiders

without unreasonably preventing residents from using their neighborhood.

The hope of the urban design team was that the changes in street traffic, combined with the gateways to residential streets, would help to structure pedestrian traffic through the neighborhood. The impact of the program on pedestrians was necessarily going to be psychological, not physical. It was thought that reduced traffic on residential streets would make them less attractive to outsiders, particularly if residents began to use them more and treat them more as their own. Essentially then, the program to control pedestrian traffic was the street changes and the improvement in definition of boundaries and spaces discussed below.

Definition of Spaces

The urban design team proposed to deal with the problem of definition of spaces in two ways. One problem was the definition of boundaries of residential areas. The team felt that there should be a clearer transition from non-residential to residential parts of Asylum Hill. The main way to achieve this was through entranceways into the North Asylum Hill residential area and at the intersections of main streets and side residential streets within the area. These entranceways were constructed as part of the street changes. They frequently consisted of narrowing the street itself and expanding the sidewalk area. The entrances were attractively landscaped and planters were placed at the entrances. Not all of the landscaping was complete by the fall of 1976; but this work was completed as soon as possible in the spring of 1977.

The other problem addressed by the physical design team was the scale of the area within North Asylum Hill. They proposed a series of "mid-block treatments", either street narrowings or boulevards in the middle of blocks, appropriately landscaped, to define a set of sub-areas within the neighbor-

hood with which residents could more easily identify. The proposal for these was included with the proposal for street changes to the City Council. However, it was decided not to implement the "mid-block treatments" for reasons of economy.

Thus, many of the entrances into North Asylum Hill and entrances onto the residential side streets were given definition as part of the physical design changes. However, the program as implemented did not include any efforts to break up larger blocks into smaller, more manageable sub-areas.

Sigourney Square Park

Another consideration of the physical design team was the open spaces and voids in the neighborhood. The team urged that efforts be made to clean up or restore a few vacant lots or abandoned buildings. However, their main concern was with Sigourney Square Park, a park in the middle of the neighborhood which was thought to exercise a negative influence over the area.

The physical design team recommended that the park be cleaned up and made more attractive in order to encourage its use by residents. The most important recommendation, however, was to structure the open space in a way that was targeted for use by such groups as small children and elderly residents. They contended that as an unstructured space, teenagers and young men would continue to dominate the use of the park, making it unattractive for others. Only by structuring the space of the park could it be returned for use by the residents.

The Sigourney Square Civic Association undertook as one of its projects the renovation of Sigourney Square Park. The park was cleaned up and benches were painted. However, plans to increase the equipment and facilities of the park and to cut up the spaces were not implemented during the evaluation period.

At the urging of citizens, as noted previously, police did make some effort to reduce the use of the park for gambling and drinking. The combination of their efforts plus the improved attractiveness of the park probably constituted some real progress. However, the basic proposal of the physical design team was not implemented.

Fencing

The physical design team proposed fencing of two types. First, one border of North Asylum Hill, railroad tracks, made it easy for teenagers and others to enter the area through backyards and lots. The physical design team urged negotiations with the railroad company to fence the entire border along North Asylum Hill to reduce this traffic. Discussions with the railroad were initiated but no fencing had been done by the spring of 1977.

Second, the physical design team urged increased fencing of private yards and parking lots to reduce the extent to which pedestrians could freely pass through private spaces. It was known that such fencing could only happen through private initiative. As far as the evaluation team could determine, no significant private fencing occurred in North Asylum Hill during the experimental year.

Conclusion

Of all the changes in the physical environment discussed, the street changes were considered to be the most important. The physical design team had concluded that reducing vehicular traffic was essential to restoring the residential character of the neighborhood and to giving residents the ability to control their neighborhood. Moreover, traffic control was something the residents could not do without help. Although there were necessarily some compromises in the final plan implemented, it was thought that the implemented plan would have a major effect on the circulation flow of traffic through the

neighborhood.

In contrast, the things that were not done, structuring pedestrian flow, defining sub-areas within the neighborhood, fencing and structuring the space in the park were all designed to help the residents do what they could have done, but were not doing, on their own: that is, to influence who used what part of their neighborhood and for what purpose. More of these would have increased the odds of success; but the street changes were considered to be a very significant positive step. One basic question which the evaluation was designed to answer was whether the street changes, with the hoped-for result of restructuring traffic, in combination with the efforts of the police and the citizen organizations, would be enough to give the neighborhood back to the residents of North Asylum Hill.

Thus the implemented program had the three components envisioned. Active community organizations participated in implementing the physical design and police components of the program as well as initiating constructive projects of their own. An area police team was established, particularly noteworthy for the quality and number of working relationships established with residents. Perhaps most important, streets were changed to route the depersonalizing flow of traffic out of most of the residential areas onto two streets; and improvements in the visual definition of the residential areas were made as well.

In the next chapter, we will present data on the effects of this program that could be observed a year after the street changes were begun.

CHAPTER V

EVALUATION OF PROGRAM IMPACTS, 1975-1977

Introduction

In this chapter, the evidence regarding the impact of the experimental program in North Asylum Hill is examined.

The goal of the program was to reduce residential burglary, street robbery/pursesnatch and the fear of those crimes among residents. The first two sections of this chapter compare measures of these crimes and the fear of them taken after the program was in place with measures from previous years. Analysis of the extent to which measures of crime and fear indicate positive changes, or a situation more positive than one would have expected, constitutes one important part of assessing the extent to which the program achieved its goals.

The model on which the Hartford experiment was based hypothesized a complex set of interdependencies. The experiment was expected to impinge on crime and fear indirectly by increasing the control residents were able and willing to exert over activities in their neighborhood, hence reducing opportunities for crime. Although some of the hoped-for changes in residents' orientations to their neighborhood were expected to take longer to materialize than the experimental year, examination of the possible program impacts of this type was essential to the evaluation in two ways. First, some such changes had to be observed for any notion that the program affected crime and fear to be plausible. Second, such an examination was essential to a better understanding of the underlying hypotheses.

These, then, are the essential goals of this chapter: to examine the evidence that the program goals were or were not achieved, and the extent to

which the achievement can be attributed to the program itself. The program was implemented in a complex environment in which events not part of the program were naturally occurring. In Chapter VI, we will examine evidence relevant to the possibility that events other than the experimental program affected the results.

Methodology

Introduction

The data utilized in this project were alluded to briefly in Chapter I and the data collection methods are described in moderate detail in the Appendix. Before beginning the presentation of data regarding the impact of the program, we here present a brief overview of the data available and the basic approach used to assess the impact of the program.

The Resident Surveys

For quantitative conclusions, the surveys of residents were perhaps the most used of all the data sources. They provided the basic measures of both the rates of victimization and citizens' perceptions and feelings about crime, which were the central dependent variables of the impact analysis. In addition, a good number of the variables through which the program was expected to achieve its benefits, such as neighborhood cohesion, increased use of the neighborhood, and relationships with the police could also be measured through the survey.

Essentially identical surveys were carried out in 1973 (as part of the neighborhood assessment), in 1975 (before the program was fully implemented), in 1976 (right before the physical design changes were implemented) and in 1977 (after the physical design changes had been in for a year or so).

Characteristics of these surveys were as follows:

a) In each case, a strict probability sample of households was selected;

b) Although the sample design involved clustering (by which we mean that usually three, or four addresses were selected from a block) the housing units selected at the block level were not contiguous but were generally well spaced around the block. This design feature produced sampling errors that were only slightly higher than those of simple random samples;

c) Except in 1976, surveys were carried out throughout Hartford. The Asylum Hill area was always oversampled to increase the reliability of estimates for that area. In 1976, interviews were carried out only in Asylum Hill, due to funding constraints.

d) Interviews were carried out at essentially the same time of year, in the spring, in 1975, 1976 and 1977. The 1973 interviews were carried out in the fall.

e) The criteria for eligibility and respondent selection procedures were identical across all years. At least someone had to have lived in a household for six months or more in order for an extended interview to be taken. This rule was adopted in order to insure a minimal basis for reporting of household crimes. From 1975 on, if no one in a selected household had lived at that address for as long as six months, a brief descriptive interview was carried out with a responsible adult simply to update demographic characteristics of the neighborhood. In households where at least one adult had lived at the address for at least six months or more, a random objective selection from among the eligible adults was made to

designate the interview respondent.

f) A core of identical questions was asked in each of the surveys. The 1973 survey instrument was somewhat longer than those that followed. A subset of the questions asked in that year was identified as critical for the evaluation component of the project and was repeated in each subsequent year. A few items were added and subtracted with each administration, but the comparisons presented in this report are based on identical items over time.

g) The surveys were carried out using a combination of telephone and personal interviewing procedures. Housing units were sampled. If it was possible to obtain a good telephone number for a selected housing unit, the interview was done via telephone. If it was not possible to obtain a telephone number, the interview was done in person. A staff of interviewers was hired and trained in Hartford to do the personal interviewing; the telephone interviewing was done via long-distance by the professional interviewing staff at the Center for Survey Research in Boston.*

h) All interviews were coded at the Center for Survey Research by the professional coding staff. Because the classification of crimes was so important in the study, all reported crimes were independently check-coded.

Observational Data

At the initial problem assessment stage, the urban designers patrolled the streets of Asylum Hill observing the housing stock, the land use and, most importantly, the way the neighborhood appeared to be used by residents

*During the first year, we did some comparisons between the results of telephone and personal interviewing strategies. We found that aggregate data collected by telephone and in-person were equivalent for comparable samples. This finding has been since replicated on a much wider scale by Tuchfarber and Klecka among others.

and nonresidents. These initial observations produced a number of qualitative conclusions which were integrated with more quantitative data in the initial assessment of the problems in Asylum Hill.

Once a plan had been developed, we asked the urban designers if they could record their observations in a somewhat more systematic fashion. In response to this request, the designers did attempt to record their observations somewhat more systematically when they reviewed the neighborhood in the spring of 1975, 1976 and 1977. They were, in fact, not successful in producing quantitative data of the type that would lend itself to tabular analysis. However, their observations were reported more systematically than was the case in 1973, and their impressions of the neighborhood and observations over time constituted another source of background information, if not quantitative data, which enlightened the evaluation of the program.

Counts

There were two specific aspects of the use of the neighborhood which we were able to quantify: the pedestrians' use of the neighborhood and vehicular traffic. At essentially the same time in 1976 and 1977, 24-hour traffic counters were put at 17 strategic locations throughout North Asylum Hill. These counters were designed to give a precise measure of the impact of street changes on traffic in the area.

In a similar way, observers were hired and stationed at 13 locations throughout Asylum Hill to count pedestrians. For six different hour-long periods during the day, counters recorded the number of persons passing their stations and, by observation, recorded the age, apparent ethnicity and sex of each pedestrian. These data were not available in 1973 but were available in essentially comparable form for the spring of 1975, 1976 and 1977.

Police Questionnaires

We wanted to obtain some direct feedback from police officers in Asylum Hill. We could not obtain real "before" data because men had to be assigned to the team before data could be collected. However, in the fall of 1975, police officers were asked to complete a questionnaire about their job, about the Asylum Hill area and about their perceptions of crime. The members of the other team in District 5, who were working in Clay Hill/SAND, also completed the questionnaire.

The data collection from police officers was replicated in the spring of 1977.

Police Record Data

The initial problem analysis involved extensive analysis of the police record data from the Hartford Police Department. Analysis included: rates of crime, the geographic pattern of crimes known to police, the residences of offenders known to police in relationship to where they committed their crimes, the demographic characteristics of known offenders and the prevalent modes of operations of offenders.

The analysis in 1973 was more detailed than was the case in later years. However, for subsequent years, certain key indicators were tabulated from the police record data. These were available from 1975 through 1977.

Monitoring

Consistent with the general multi-method approach of this evaluation, we thought it was important to have an outside view of police operations. Therefore, a person knowledgeable in police operations visited the Asylum Hill Police Team from time to time during the evaluation year, making sys-

tematic observations.

The Hartford Institute maintained a close working relationship with the community organizations through the 1975 through 1977 period. We relied on the Hartford Institute staff members to provide us with a good deal of information about such matters as the way in which the organizations operated, the number of people that were involved, the kinds of problems they were facing and the steps they were taking to solve them.

These reports from the Hartford Institute were supplemented by a set of direct interviews carried out by Center for Survey Research personnel with key members of community organizations and others residing in the Asylum Hill area.

Taken together, these steps were designed to provide the evaluators with multiple input regarding what was going on in the area, both as a way of being able to describe the program as implemented and, perhaps more importantly, providing a sound context within which to interpret the more quantitative findings.

The police monitoring and community leader interviews occurred primarily during the 1976-1977 year period. The Hartford Institute reports on community activity extended from 1975 through 1977.

The Analysis.

There are several general points about the analysis that should be emphasized before we begin. First, it is important to understand the period that is being evaluated. As noted earlier, mobilization of the community organizations began in the fall of 1974; the police team was formed, if not fully operational, in the spring of 1975. However, the street changes were

not begun until June, 1976; they were not completed until November, 1976.

As evaluators, we had to make some decisions about when the program was in place. The analysis that follows primarily treats the year from July 1, 1976 through June 30, 1977 as the "evaluation year". Although the street changes were not fully in place at the beginning of the year, they, along with the police and community organizations, were there for most of that year (see Figure 4).

It is worth noting that the entire year is a meaningful referent only with respect to figures based on that year, such as crime rates. Many of the important measures in the analysis, including measures of fear, pedestrian and vehicular counts and neighborhood observational data do not utilize that year as a referent but rather measured the way things were, the state of the situation in Asylum Hill, as of the spring of 1977.

Observers might also question whether the program began when the street changes were implemented or earlier. The data with which we are working enabled us to address the question of whether the implementation of the police and community organization components of the program alone affected the neighborhood, or whether the neighborhood was affected only after all three components of the program were in place.

The analysis utilized two kinds of comparisons. One is a set of comparisons over time. The reader will note that when comparing survey estimates across time, we were quite cautious about conclusions based solely on a comparison of 1976 figures with those in 1977. The reason for this is that data were collected in the spring of 1976 for Asylum Hill only; we feel uncomfortable without comparable data for the rest of the city. Therefore, we have tended to use the 1976 data with care and express confidence in the findings only when the patterns were consistent with the 1975 to 1977 com-

parisons as well.

The other kind of comparison that is made is between what happened in North Asylum Hill and what happened elsewhere in Hartford. When the evaluation was designed, one suggestion was to identify a "control area" which was similar to North Asylum Hill but would be "untreated" to provide a basis for comparison. That notion was rejected, we believe wisely. The difficulty of identifying a reasonably comparable area is one problem. There was also the danger that something unexpected would happen that would contaminate this single area and render it useless as an appropriate control.

In this analysis, we have used several different areas within Hartford, not as controls exactly, but rather as a basis for comparison for testing particular hypotheses. For many hypotheses, the entire city of Hartford was an appropriate basis for comparison. General kinds of changes, such as the economy, the weather, or general values that might have affected crime in North Asylum Hill, would certainly have produced similar changes throughout Hartford.

For other purposes, we chose to compare North Asylum Hill with South Asylum Hill and with the combined adjacent neighborhoods to the north and west of North Asylum Hill. Neither of these areas would have been appropriate as "the one and only control", because events were happening which might well have affected patterns there. However, for certain specific hypotheses, the ability to compare the experience in North Asylum Hill with these areas provided information and enabled us to reach conclusions we otherwise could not have reached.

Therefore, we are hopeful that the reader will not be confused or concerned about the fact that North Asylum Hill figures are compared with these different referents at different points in the analysis. We believe that the

potential to make these varied comparisons actually constitutes an important strength of the evaluation design, not a shortcoming. We trust that the presentation of the rationale for the comparisons and the inferences that can be drawn from them are clear.

Finally, we need to mention briefly the problem of "statistical significance". Whenever a numerical analysis is being carried out, particularly when it is based on sample survey data, it is possible that a change or difference will occur in the numbers, simply due to chance variation rather than because of a real change in the phenomena being measured. When a change observed in the numbers is a small one, or when the numbers are based on only a small number of interviews or observations, the risk of making an error is greater than when large changes are observed in large bodies of data.

Statisticians have ways of calculating the likelihood that a difference observed could be a chance difference rather than reflecting a real change or difference. The usual criterion, which may seem very strict to many readers, is that a real difference or change must be large enough to have occurred by chance less than five times in a hundred. That is to say, statisticians like to be very confident that the change they are observing is real before they say that it is "statistically significant". This approach can lead to an error of another kind: namely, that a real change or impact is missed or not identified because the statistical criteria were too stringent or the samples were too small.

Because of the importance of this experiment, we have opted for a statistically conservative approach to the assessment of impact; we have not labelled a change or impact "statistically significant" unless it meets the strict requirement of being a chance occurrence less than five times

3
in one hundred. However, in a few critical instances where that strict criterion is particularly important and where a difference might have been declared "significant" by less stringent criteria, we have noted this fact also, to afford readers the opportunity to reach their own conclusions.

A final technical note. The probabilities of selection varied across Hartford areas. Also, selecting one adult per household as respondent meant the probability of respondent selection depended on household size. All tabular figures in this report have been appropriately weighted to adjust for different probabilities of selection. The N's given are the actual raw numbers of cases which are the appropriate base for calculating statistical significance.

The task of the evaluator in a project like this is twofold: to present the relevant data and to integrate the data into an organized set of conclusions. Having spent a great deal of time thinking through the large quantities of information available to us, it is impossible for us not to have reached some conclusions about the program and what happened in North Asylum Hill. However, we have attempted to present a wide range of information that bears on the impact of the program, including both data that are consistent with our conclusions and those that are not, in order that the reader can reach conclusions on his or her own. The number of possible tables is too large to include in a reasonable length chapter; but many additional tables are available to the interested reader in the appendices.

We believe that a strength of the Hartford experiment is that there was an exceptionally good evaluation component to the project. Although it is always difficult in social science to be definitive, we hope that the information that follows will make readers feel they have a good basis for reaching conclusions about the impact of the Hartford project.

Impact on Crime

Introduction

In 1973, when the neighborhood analysis began, victimization rates and resident perceptions indicated that the most important crime problem in North Asylum Hill was street crime: robbery and pursesnatch. Burglary rates were comparatively high in the city of Hartford as a whole. However, in 1973, the rate of burglary in North Asylum Hill was below the city average, and resident concerns about burglary, while somewhat higher than one might have expected from the crime data, were only about average for the city of Hartford.

By 1975, when the first stages of implementation had begun, burglary had increased in North Asylum Hill to a point above the city average. Residents' concern about burglary in 1975 equaled their concern about street crime.

Although the initial program design emphasized street crime, and particularly the fact that robbery and pursesnatch were common on the residential interior streets, the basic approach of the program was considered to be equally appropriate for residential burglary and for street crime on residential streets. With respect to both crimes, the impersonality of the neighborhood and the lack of resident involvement in area events were thought to create criminal opportunities. Increased resident surveillance and involvement was hypothesized to be the way to reduce criminal opportunities. Thus, the question to be addressed is whether or not the program was successful in reducing burglary and street crime in North Asylum Hill during its first year.

Residential Burglary*

The critical analytic question was whether or not the burglary rate in North Asylum Hill in the test year was lower than it would have been had there been no program. To answer that question, one must make an estimate of what the burglary rate would have been.

One possibility is to say the burglary rate would have stayed the same as the preceding year. Our estimate, based on the comparatively small sample survey in 1976, was a burglary rate of 18.4 per 100 households.

As the figures in Table 5.1 show, few people would consider a stable burglary rate to be the best prediction. The rate had been rising steadily in North Asylum Hill and throughout Hartford. The data lead clearly to a projection of a continued rise.

There are at least two ways to project an expected rate in North Asylum Hill for 1977. If one observes the rates in that area since 1973, the figures

*Here and elsewhere in this report statements about the rates of crime (indeed all data) are for fiscal years beginning July 1; "1977" refers to 1976-1977, "1976" refers to 1975-1976, and so forth. The exception is 1973, which refers to the period fall 1972-1973. The rates are based on victimization survey data. Although surveys do not provide a perfect measure of the actual rate of crime, comparisons between surveys done in different years should provide a reliable indicator of the direction and magnitude of changes in crime rates, because the procedures used were identical in each year studied. In contrast, there were several factors that differentially affected rates calculated from police record data and rendered comparisons between years based on these data difficult or impossible to make. (See Appendix A for full discussion of this point.) As a result, we generally have not used police record data in this report to assess changes in the incidence of crime. However, in some cases we have compared the characteristics of crimes or offenders known to police across years. Such an analysis is based on the assumption that the biases, if any, in such police data are relatively constant from year to year; therefore, the comparisons across years are meaningful. Although the validity of this assumption could be questioned, we have not been able to uncover a reason to think that it is not a valid assumption for the purposes of this evaluation.

Table 5.1

BURGLARY VICTIMIZATION
(rates per 100 households)**

	<u>1973</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>
North Asylum Hill (N)**	7.5 (93)	14.8 (88)	18.4 (76)	10.6*** (232)
Total City (N)**	9.8 (890)	12.4 (556)	*	15.2 (885)

*Data are not available for this time period.

**1973 rates are for the calendar year; other rates are for fiscal years beginning July 1. Bases used for computation of the rates are N multiplied by the mean number of persons per household in the given area and time period.

***The calculated standard error of this estimate is 1.52 crimes per 100 persons.

were 7.5 for 1973, 14.8 for 1975, and 18.4 for 1976. If the burglary rates had continued to increase at the same rate, a burglary rate of over 22 burglaries per 100 households would have been observed.

Another approach is to look at the city-wide experience and use that as a guideline for North Asylum Hill. We do not have a survey estimate for the city for 1976. However, between 1975 and 1977, the Hartford burglary rate increased at the rate of 12 percent per year. If the Asylum Hill rate had increased between 1975 and 1977 at that same rate, we would have observed a burglary rate of 18.6 per 100 households.

Thus, two approaches led us to expect a rate of about 18.5. A third approach, projecting directly from the figures for North Asylum Hill, projects a rate of over 22 per 100 households. The observed rate shown in Table 5.1 is 10.6 per 100 households.

As noted previously, estimates based on samples can vary from the true population figure by chance alone. We calculated the odds that the true burglary rate in North Asylum Hill could be as high as 18.5 or 22 per 100 households. We found that the chances are 95 in 100 that the true burglary rate was less than 18.5 per hundred; they are 99 in 100 that the rate is less than 22 per 100 households.*

In short, there can be little doubt that there was a distinctive, substantial drop in the rate at which housing units in North Asylum Hill were burglarized in 1976-1977 - below the rate for the preceding year, lower than one would have expected given the city-wide experience, and a rate approxi-

*Standard errors on which these statements are based were calculated, taking into account the clustered sample design. Statements are based on a conservative two-tailed test. A one-tailed test yields even stronger statements. (See Appendix A).

mately half of what would have been projected from the pattern of burglary over the preceding five years.

Street Robbery/Pursesnatch

Conclusions about street robbery and pursesnatch are more difficult to reach because the rates are lower. Because of the normal variability associated with estimates from a sample survey, real and important changes in events with low rates such as robbery and pursesnatch can occur without our being able to say with confidence, statistically speaking, that a real change has occurred.

These comments are needed because the actual findings with respect to robbery and pursesnatch in North Asylum Hill present just this kind of statistical dilemma. In 1975, the robbery/pursesnatch rate in North Asylum Hill was estimated from the victimization survey to be 3.6 per 100 residents; in 1976, the comparable figure was 5.1 per 100 residents (Table 5.2).

As was the case with burglary, there are at least three ways to estimate an expected rate of robbery/pursesnatch in North Asylum Hill for 1976-1977.

1) One could estimate that it would be the same as the preceding year. On this basis, the expected number is 5.1 per 100 persons.

2) One could use the survey estimates of a pattern of rising street crime in North Asylum Hill as a basis for projection. The rates of change had not been constant from 1973 to 1976, though the direction was consistently upward. A conservative average rate of increase is 20 percent per year. On that basis, one would have expected 6.1 robbery/pursesnatch events per 100 persons for 1976-1977.

Table 5.2.

STREET ROBBERY/PURSES/NATCH VICTIMIZATION
(rates per 100 persons)**

	<u>1973</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>
North Asylum Hill (N) **	2.7 (93)	3.6 (88)	5.1 (76)	3.7*** (232)
Total City (N) **	1.0 (891)	2.1 (556)	*	2.7 (885)

*Data are not available for this time period.

**1973 rates are for the calendar year; other rates are for fiscal years beginning July 1. Bases used for computation of the rates are N multiplied by the mean number of persons per household in the given area and time period.

***The calculated standard error of this estimate is 1.52 crimes per 100 persons.

3) Using the city-wide experience between 1975 and 1977 and applying it to the 1975 Asylum Hill rate leads to a middle ground prediction of 5.8 per 100 persons.

Using the same statistical approach used for burglary, we can say that the odds are 95 in 100 that the robbery/pursesnatch rate falls in the range of 3.7 ± 3.0 (i.e., between 0.7 and 6.7) per 100 persons. Using a one-tailed approach, the odds are 95 in 100 that the true rate is no higher than 6.0 per 100 persons. The odds are about two out of three that the true rate in 1976-1977 was lower than in the preceding year.

For non-statisticians, the above paragraph may seem confusing, or cumbersome, or pedantic. However, the point to be gleaned is important: given the sample size and the particular rates involved, the figure of 3.7 per 100 persons is not different enough from the projected rates of robbery/pursesnatch to meet the usual criteria for statistical confidence. Depending on which approach is chosen and which projection seems best, the odds are better than two in three but less than 95 in 100 that the robbery/pursesnatch rate in North Asylum Hill was lower than would have been expected.*

It is worth noting another change that occurred in robbery, that indicates some impact on street crime opportunities in North Asylum Hill. As noted previously, one of the striking features of street crime in North Asylum Hill was the rate at which it occurred on residential streets rather

*It should be noted that victimization surveys such as those used here estimate the person crime rate for residents of a neighborhood. Because person crimes do not necessarily occur at home, of course, such rates are not the same as the incidence of crimes that occur in a particular geographic area, which is what police records record. For the comparisons reported here, no street crimes were counted which occurred outside the city of Hartford; however, victimization figures do not include the robberies or pursesnatches that occurred to non-residents within the North Asylum Hill area during the experimental year. Approximately half of the street crimes reported to police in 1973 occurred to non-residents.

than on main streets. This pattern persisted from 1973 on through 1976, when some 64 percent of street robberies were on residential side streets. This pattern was taken by the study team analysts to be one important indication of the impersonal character of residential streets in North Asylum Hill.

Therefore, it is very significant that according to police records of where robbery/pursesnatch offenses occurred in 1977, there was a shift away from residential streets to main streets. Only 42 percent of the robberies known to police in the experimental year occurred on residential side streets (compared to 64 percent the year before) (Table 5.3). The meaning of these data will be discussed later in this chapter when the data regarding the way the program worked are examined. However, the shift in the pattern of street crime is evidence that there was a program impact on robbery/pursesnatch.

In conclusion then, the data regarding changes in the rate of street robbery/pursesnatch in North Asylum Hill are less definitive than those with respect to burglary. Despite the fact that the estimated rate of robbery/pursesnatch for residents was nearly 30 percent lower than in the preceding year, we can only say that the victimization rate surely did not go up and the odds are considerably better than 50-50 that it actually declined. Moreover, the fact that there was a marked change in the pattern of street crime, shifting the occurrence of these events from residential streets to main streets, is further evidence that something happened during the experimental year that affected the behavior of criminal offenders. Taken together, one could at least say that the data are consistent with the hypothesis that the program had a salutary affect on street crime on residential streets in North Asylum Hill.

Table 5.3

LOCATION OF STREET ROBBERIES IN ASYLUM HILL

	<u>1976</u>	<u>1977</u>
<u>North Asylum Hill</u>		
Main Street	36%	58%
Side Street	<u>64</u>	<u>42</u>
TOTAL	100	100
(N)	(107)	(52)

<u>South Asylum Hill</u>		
Main Street	42%	52%
Side Street	<u>58</u>	<u>48</u>
TOTAL	100	100
(N)	(80)	(60)

Geographic Displacement

A common finding when crime is reduced in a particular area is that similar crimes increase proportionately in adjacent areas. Consequently, the rates of residential burglary and street robbery/pursesnatch in nearby areas were examined for evidence of displacement. There were two areas that seemed particularly likely to be targets: South Asylum Hill and an area to the north and west of North Asylum Hill which we labelled "adjacent area".

Because the data most clearly support the position that burglary was reduced in North Asylum Hill, we first looked for evidence of displacement of burglary. There was no evidence of direct displacement of burglary out of North Asylum Hill to the areas adjacent to it (Table 5.4). The rate of burglary in South Asylum Hill was the same in 1977 as in the preceding year. If anything, given the overall increase in burglary throughout the city of Hartford, this constitutes a lower-than-expected burglary rate. In the other area adjacent to North Asylum Hill, the burglary rate appeared to have increased slightly from 10 to 14 per 100 households; however, this difference was not statistically significant. Moreover, the figures are quite in line with the city-wide experience. Therefore, it does not seem to be a tenable hypothesis that the reduction of burglary in North Asylum Hill was due to or caused a simple transference of burglary activity to nearby targets.

We are aware, however, that identifying displacement of burglary can be more complicated. Given the fact that burglary increased in Hartford as a whole, inevitably there were some areas where burglary was higher in 1977 than it had been in preceding years. There was one area within reach of offenders known by police to have committed burglaries in North Asylum Hill, which experienced a marked increase in burglary during 1977. We discuss in

Table 5.4

BURGLARY VICTIMIZATION BY AREA
(rates per 100 households)**

	<u>1973</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>
North Asylum Hill (N)	7.5 (93)	14.8 (88)	18.4 (76)	10.6 (232)
South Asylum Hill (N)	2.2 (92)	4.6 (88)	7.8 (64)	7.7 (118)
North and West Adjacent Area (N)	8.2 (85)	10.2 (49)	*	13.7 (73)
Total City (N)	9.8 (890)	12.1 (556)	*	15.3 (885)

*Data not available for this time period.

**1973 rates are for the calendar year; other rates are for fiscal years beginning July 1.

Chapter VI some factors which would seem to explain this increase more plausibly than a simple displacement of burglary out of North Asylum Hill due to the impact of the program.

It is impossible to rule out completely the possibility of geographic displacement. However, the combination of an offender population that operates in a limited area on foot, the fact that a considerable amount of burglary is unplanned and casual and the fact that the program covered a reasonably large area, led the designers of the program to hope that displacement would be minimal. At the very least, one could say that if displacement of burglary occurred as part of the reduction of burglary, it did not occur in the most obvious places for it and the pattern was difficult to identify.

In contrast, there may have been an increase in the rate of street crime against residents of South Asylum Hill, though not in other adjacent areas (Table 5.5). The statistical problems discussed earlier affect this analysis. The difference between the figures for 1976-1977 and those for the preceding year, does not meet normal statistical requirements for significance. The odds are 7 out of 10 that street crime did rise in South Asylum Hill. Since offenders were thought to pass through both South and North Asylum Hill, an increase in South Asylum Hill is exactly what one would expect if robbery/pursesnatch opportunities were reduced in North Asylum Hill.

People argue that if a crime control program does nothing but move crime from one place to another, there has been no gain. In the case of burglary, it is difficult to argue with that position. As noted, however, it does not appear that the reduction of burglary in North Asylum Hill was accompanied by a proportionate increase in burglary in nearby areas. In the case of street robbery/pursesnatch, however, it could well be argued that moving crime from residential streets, where people live, onto less

personal main streets may improve the quality of life of residents. It also increases the potential for police surveillance and intervention, which is nearly impossible when crimes are spread evenly throughout an area.

Since street crime in South Asylum Hill may not have increased, just as it may not have decreased in North Asylum Hill, displacement may be a needless concern. However, there are occasions when moving street crime may be beneficial. It would require further analysis to determine whether or not any redistribution of street crime in Asylum Hill had some benefits.

Displacement to Other Crimes

Another possible effect of a successful program against a particular type of crime is to redirect active criminals from one type of crime to another similar type of crime. Such a change seems relatively unlikely for an area-level crime prevention program. Geographic displacement would seem much more likely than actual changes in crime preferences among chronic offenders. Indeed, there are only two kinds of crimes against residents of an area that would produce similar results for offenders: car theft and theft from premises which did not involve breaking and entering.

Examination of the victimization rates with respect to these two crimes shows scant evidence of any such pattern (Table 5.6). The rate of car theft in North Asylum Hill had been extremely low and remained constant, or even declined slightly, in 1977 compared with previous years. The rate of theft from premises without breaking and entering had been rising steadily in North Asylum Hill and continued to do so in 1977. However, there was not a marked increase in this crime. The rate of increase was consistent with the experience citywide.

Table 5.5
STREET ROBBERY/PURSES/NATCH VICTIMIZATION
BY AREA
(rates per 100 persons)**

	<u>1973</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>
North Asylum Hill (N)**	2.7 (93)	3.6 (88)	5.1 (76)	3.7 (232)
South Asylum Hill (N)**	0.8 (92)	4.1 (88)	3.6 (63)	7.9*** (118)
North and West Adjacent Area (N)**	2.0 (85)	2.0 (49)	*	2.2 (73)
Total City (N) **	1.0 (891)	2.1 (556)	*	2.7 (885)

*Data not available for this time period.

**1973 rates are for the calendar year; other rates are for fiscal years beginning July 1. Bases used for computation of the rates are N multiplied by the mean number of persons per household in the given area and time period.

***The calculated standard error of this estimate is 1.52 crimes per 100 persons.

Table 5.6

OTHER PROPERTY CRIME VICTIMIZATION
(rates per 100 households)

<u>Area and Type of Crime</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>
North Asylum Hill:			
Car Theft	3.4	3.9	2.5
Other Theft from Premises	20.5	25.0	28.6
Mailbox Theft (N)	1.1 (88)	3.9 (76)	12.9 (232)
Total City:			
Car Theft	5.9	*	4.9
Other Theft from Premises	17.2	*	20.4
Mail Theft (N)	12.7 (556)	* *	10.6 (885)

*Data not available for this time period.

The one crime involving theft that did increase between 1976 and 1977 was mailbox theft. This does not seem to be a particularly appropriate crime for burglars, specially since most of those known to have committed crimes in North Asylum Hill in recent years lived outside the area.

Once again we are in a position where we cannot absolutely rule out the possibility of some shifting of criminal activity from burglary or street robbery/pursesnatch to some other crime. However, the evidence, taken in combination with what is known about the offender population, makes it appear relatively unlikely that any significant change of this type occurred in North Asylum Hill.

Conclusion

Thus, having examined the data with respect to crime, it is clear that there was a marked reduction in the rate of burglary in North Asylum Hill and it is likely that there was some decrease in the rate of street crime against residents as well. In addition, there was no obvious evidence of displacement of burglary to adjacent areas, though there is some support for the notion that some street crime was displaced from North Asylum Hill to South Asylum Hill. From these data, it would be difficult not to conclude that crime against residents in North Asylum Hill decreased markedly in 1976-1977.

Impact on Fear of Crime

Introduction

Resident fear or concern about crime was as important a target of the program as crime itself. It was thought that personal fear and the perception of significant criminal activity were real factors which undermine the

quality of life in a neighborhood area.

It was thought that the most effective way to affect resident fear and concerns about crime was to reduce crime. In addition, it was found that the perception of alien street activity, such as loitering teenagers and drunken men, was associated with fear or concern about crime. Therefore, in addition to crime itself, it was thought that reducing such obvious nuisances in public places and making people feel more comfortable on the streets in their neighborhood might make an additional contribution to the reduction of fear.

Residential Burglary

In the research literature, "fear" of crime is sometimes used to cover several different concepts. In designing the questionnaire, we distinguished between three different components of residents' subjective responses to crime: the cognitive perception of personal risk was measured by questions on the perceived likelihood of being a victim. The evaluation of the crime situation was measured by questions about how "big" the problem was. The effective component, which comes closest to fear, was measured by questions of how "worried" people were that they would be victims. In a real sense, none of these is "fear of crime". However, they are the components of people's subjective responses to community crime.

Of the three types of measures regarding burglary, two showed a statistically significant improvement between 1976 and 1977. Fewer residents rated burglary as a "big problem" than had done so in the past, and residents rated their likelihood of being burglary victims significantly lower than they had in the past (Tables 5.7-5.8). There was not a significant difference in the rate at which residents said they were "worried" about

Table 5.7

PERCEPTION OF BURGLARY AS A NEIGHBORHOOD CRIME
PROBLEM

	<u>1973</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>
<u>North Asylum Hill</u>				
Big problem	21%	35%	48%	31%
Some problem	33	46	35	44
Almost no problem	<u>46</u>	<u>19</u>	<u>19</u>	<u>25</u>
TOTAL	100	100	100	100
(N)	(91)	(87)	(73)	(229)
<u>South Asylum Hill</u>				
Big problem	20%	17%	25%	25%
Some problem	31	41	52	42
Almost no problem	<u>49</u>	<u>42</u>	<u>23</u>	<u>33</u>
TOTAL	100	100	100	100
(N)	(90)	(85)	(56)	(110)
<u>Total City</u>				
Big problem	19%	28%	*	21%
Some problem	37	41		40
Almost no problem	<u>44</u>	<u>31</u>		<u>39</u>
TOTAL	100	100		100
(N)	(872)	(545)		(879)

*Data not available for this time period.

Table 5.8

MEAN POSSIBILITY OF BURGLARY OCCURRING WHEN NO ONE IS AT HOME
DURING A YEAR**

	<u>1973</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>
<u>North Asylum Hill</u>	(91)	(88)	(74)	(220)
Mean	4.1	4.9	5.3	4.9***
<u>South Asylum Hill</u>	(88)	(85)	(62)	(111)
Mean	3.3	3.0	2.7	3.6
<u>Total City</u>	(862)	(547)	*	(815)
Mean	4.1	4.7		4.9

*Data not available for this time period.

**The number of cases upon which means and standard deviations are based are indicated in parentheses.

***The standard error, taking into account the sample design, was calculated to be .19.

burglary.*

In general, we feel that the two measures that changed were better measures of citizen response to crime than the one that did not. An analysis of this item over the years has shown it to be considerably more related to personal characteristics, such as age and sex, than to situational characteristics. Note in Appendix Table B1 that there was no change in the aggregate response to this item between 1973 and 1975 despite the fact that the rate of burglary nearly doubled during that period. In contrast, the ratings of the extent to which burglary was a problem and the perceived likelihood of being a burglary victim closely paralleled the estimates of the actual rates of burglary.

Therefore, we believe we are justified in concluding that the significant reduction in burglary in North Asylum Hill was accompanied by a significant decline in resident perceptions in the likelihood of being a burglary victim and a significant decline in resident perceptions of the extent to which burglary was a problem in North Asylum Hill.

Street Robbery/Pursesnatch

The analysis of the actual rates of street robbery/pursesnatch were somewhat inconclusive. The victimization rates indicate the likelihood of residents being victims of such crimes had definitely not gone up between 1976 and 1977 and had probably gone down. However, the reduction was not great enough to be statistically significant, nor was it lower than the 1975 level. The data on fear or concern about street crime are similar.

*Data discussed in the text without a specific table reference may be found in Appendix B.

A set of questions parallel to those about burglary was asked. In addition, there was a question about how safe people felt walking alone on their streets during the day. The readings on these measures were slightly more positive in 1977 than in 1976 (see Tables 5.9-5.10). However, in all cases the changes were small and not statistically significant. None of the patterns of responses in 1977 was as positive as those in 1975, a pattern which paralleled the victimization data. In contrast, the responses with respect to burglary were invariably more positive than in 1975, again a pattern which precisely paralleled the victimization data.

Conclusion

In conclusion, then, the perceptual data for residents closely parallel the figures with respect to the rates of burglary and robbery/purse-snatch. This, in itself, is a rather important finding. That is, the data suggest as clearly as any data in the research literature that citizen perceptions do respond over time to the reality about them. In addition, the data reinforce the conclusions reached in a previous section: that there was a clear and definite improvement with respect to burglary in Asylum Hill and that an improvement with respect to street crime was likely, but less clear cut and less dramatic.

How the Program Worked: Testing the Underlying Hypotheses

Introduction

The theory on which the North Asylum Hill Program was based specified a complex set of relationships between the physical environment, the neighborhood residents, the police and potential offenders. The program was intended to intervene and change these relationships so that they would work in

Table 5.9

MEAN POSSIBILITY OF BEING ROBBED ON NEIGHBORHOOD STREETS
DURING A YEAR**

(0 = No possibility, 10 = Extremely likely)

	<u>1973</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>
<u>North Asylum Hill</u>	(92)	(85)	(72)	(221)
Mean	4.3	3.9	4.5	4.2***
 <u>South Asylum Hill</u>	 (90)	 (86)	 (59)	 (109)
Mean	3.8	3.8	4.3	4.6
 <u>Total City</u>	 (858)	 (441)	 *	 (817)
Mean	3.1	3.5		3.5

*Data not available for this time period.

**The number of cases upon which means are based are indicated in parentheses.

***Standard error, taking into account the sample design, was calculated to be .20.

Table 5.10
DEGREE OF SAFETY FELT WHEN ALONE IN THE NEIGHBORHOOD DURING THE DAYTIME

	<u>1975</u>	<u>1976</u>	<u>1977</u>
<u>North Asylum Hill</u>			
Very safe	32%	30%	31%
Reasonably safe	58	41	50
Somewhat unsafe	7	20	13
Very unsafe	<u>3</u>	<u>9</u>	<u>6</u>
TOTAL	100	100	100
(N)	(86)	(76)	(232)
<u>South Asylum Hill</u>			
Very safe	44%	38%	27%
Reasonably safe	48	48	51
Somewhat unsafe	4	10	17
Very unsafe	<u>4</u>	<u>4</u>	<u>5</u>
TOTAL	100	100	100
(N)	(87)	(63)	(118)
<u>Total City</u>			
Very safe	43%	*	37%
Reasonably safe	41		46
Somewhat unsafe	10		11
Very unsafe	<u>6</u>		<u>6</u>
TOTAL	100		100
(N)	(549)		(885)

*Data not available for this time period.

the direction of reducing criminal opportunities.

In this section, we examine the evidence that these relationships were or were not changed. The purpose of this examination is at least threefold. First, it appears necessary that at least some of the expected changes occurred in order to make the case that the program itself was responsible for the observed reductions in burglary and fear. Second, it is important for others who might want to design such a program to understand the ways in which the program was successful. Third, this evidence would give us some basis for assessing the validity of the underlying hypotheses on which the program was based.

It is important to keep in mind, however, that the absence of an expected change does not in itself constitute proof of a faulty theory. An alternative explanation is that the expected changes had not had time to take place. We have already noted that some of the expected changes would likely take more than a year to materialize. Moreover, although the data available for the evaluation were very rich, there are places where the measures were less than perfect or the number of cases available was too small for confidence.* This, too, would produce inconclusive results.

With these considerations in mind, we present the available evidence about the way the program worked. The very nature of the underlying hypotheses, which specified a complex interdependence among the variables, makes orderly presentation and examinations of the hypotheses difficult. We discuss the hypotheses in an order chosen to maximize clarity of presentation rather than to reflect any particular set of priorities.

*We point such places out in the text where appropriate. Additional information is available in Appendix A. Tables A5-A7, with associated explanations, present generalized information on the size of percentage differences needed for statistical significance for various numbers of cases.

The Physical Environment and Non-Resident Use of the Neighborhood

The physical design team had noted that the relatively heavy non-resident use of the neighborhood was a depersonalizing factor. Even residential side streets belonged to anyone and everyone. Therefore, a principal immediate goal of the physical changes was to return the area to residents by reducing non-resident traffic through the neighborhood and by structuring that which could not be curtailed. Although it was considered desirable to affect both vehicular and pedestrian use of the neighborhood, the program as implemented was not necessarily expected to affect pedestrian traffic.

The physical changes clearly had the desired effect on vehicular traffic. According to the traffic counts, streets that were blocked had marked decreases in vehicular traffic (Table 5.11); most of the other streets in the neighborhood expected to be affected by the street changes showed reductions in traffic as well. The two "collector" streets that were left open to carry traffic through the neighborhood both showed an expected modest increase in traffic, as did the streets around North Asylum Hill. An overall effect of the program was to reduce the total amount of traffic through the neighborhood.

Data on resident perceptions of traffic appear at first glance to present a different picture. In the aggregate, there was little change in resident perceptions of the amount of traffic in the streets in front of their homes. However, this is a good example of an average masking an important trend. When answers were broken down by whether respondents lived on a street which had been blocked, narrowed or untreated, there was clear evidence that residents did notice the change in traffic. Those on treated streets were much more likely to say traffic was "lighter", those on untreated streets that it was "heavier" (Table 5.12).

Table 5.11

CHANGE IN VEHICULAR TRAFFIC BY TYPE OF STREET TREATMENT

<u>Type of Treatment*</u>	<u>Vehicles Counted</u>		<u>Percent Change</u>
	<u>1976</u>	<u>1977</u>	
Blocked ^a	7,343	1,850	-75
Narrowed			
Entrance to cul-de-sac ^b	2,303	2,780	+21
Other ^c	6,123	4,185	-32
Total narrowed	8,426	6,965	-17
Untreated			
Interior residential ^d	8,219	6,963	-15
Interior collector ^e	24,296	26,424	+9
Border streets ^f	38,886	41,229	+6
Total border/collector	63,182	67,653	+7
Total untreated	71,401	74,616	+5
Totals			
Interior residential	23,988	15,778	-34
Interior	48,284	42,202	-13
All streets	87,170	83,431	-4

a Includes Sargeant and Ashley Streets west of Sigourney

b Includes May and Willard Streets

c Includes Ashley St. (east of Sigourney) and Huntington St.

d Includes Atwood St. and Sargeant St. (east of Sigourney)

e Includes Sigourney and Collins Street

f Includes Woodland St., Asylum Ave., and Garden St.

* Streets with both types of treatments are categorized according to the treatment nearest the counter.

Table 3.12

PERCEIVED CHANGE IN DAYTIME VEHICULAR TRAFFIC IN FRONT OF HOME
DURING THE PAST YEAR WITHIN NORTH ASYLUM HILL BY TYPE OF
STREET CHANGES FOR 1977

	<u>Blocked</u>	<u>Narrowed</u>	<u>Untreated</u>
Heavier	21%	14%	35%
About the same	48	65	64
Lighter	<u>31</u>	<u>21</u>	<u>1</u>
TOTAL	100	100	100
(N)	(60)	(60)	(91)

The measurements, both of the traffic counts and resident perceptions, could not, of course, differentiate between resident and non-resident traffic. However, the earlier analysis of the patterns of traffic clearly documented the fact that most of the traffic in North Asylum Hill was non-resident. It is reasonable to assume that the changes observed were in non-resident vehicular traffic as well. Although we have no standards by which to say how much reduction or restructuring of traffic was "enough", there can be little doubt that a considerable amount of restructuring of non-resident vehicular traffic was accomplished by the program. As a result, a number of residential streets in North Asylum Hill had considerably less traffic in 1977 than they did in 1976.

The primary means of assessing the patterns of pedestrian traffic was a standardized set of counts carried out by observers at various places throughout Asylum Hill in 1975, 1976 and 1977. Counters attempted to classify pedestrians by age, sex and ethnicity.

Although the program did not have any components which would directly affect pedestrians, it was hoped that streets with reduced vehicular traffic, well-defined entrances, and perhaps a more interested community of residents would be less attractive to outsiders.

Based on analysis of the pedestrian counts, it appears that some restructuring of pedestrian traffic may have occurred, particularly the paths students took through the neighborhood commuting to or from school. There was a reduction in east-west traffic for young people during the hours immediately before and after school (Table 5.13). The students' path is mainly a north-south path. To the extent that they were walking on east-west streets, it constituted random wandering of the kind that the program hoped

Table 5.13

CHANGES IN STREETS USED BY PEDESTRIANS
WALKING TO AND FROM SCHOOL**

	<u>Number Counted</u>		<u>Percent Change</u>
	<u>1976</u>	<u>1977</u>	
<u>North-South Streets</u>			
Treated residential	979	1009	+3
Untreated residential	301	156	-48
Collector/border	190	148	-22
Total North-South	1470	1313	-11
 <u>East-West Streets</u>			
Treated residential	72	72	0
Untreated residential	162	68	-58
Collector/border	58	62	+7
Total East-West	292	202	-31
 All Streets	1762	1515	-14

**Includes only persons under 20 counted during hours of travel to and from school (7:30 - 8:30 AM and 2:15 - 3:15 PM).

to discourage. In addition, students were apparently using fewer north-south streets in 1977 than in 1976. Their north-south path had become more concentrated, another indication of less random wandering.

It should be noted that the treated streets had carried by far the largest number of students in 1976. There was very little change in the counts for these streets for 1977. Hence, the students' main path through the neighborhood was not changed. Rather it apparently became more concentrated.

The most substantial changes, in terms of percent change, were for untreated residential streets; however, in terms of the actual numbers of young people involved, these changes were modest. It is not certain that they were significant from the point of view of the character of the neighborhood. The data from the resident surveys provide little evidence of aggregate perceptions of a reduction of pedestrian traffic or a change in the mix of residents and non-residents on the streets. However, we note that resident perceptions of changes in vehicular traffic were modest, too, in the face of fairly large changes in vehicular traffic on some streets.

The Physical Environment and Residents' Use of Space

A principal goal of the changes in the traffic patterns was to encourage residents to use their neighborhood more. Increased use by residents was seen as a key step to increased resident surveillance and control.

There were three survey questions which dealt directly with this issue: the frequency with which residents walked somewhere in their neighborhood, the rate at which they said they liked using the park, which is centrally located in the neighborhood, and the rate at which they spent time out-of-doors in their yards or on their porches. One of these three mea-

asures showed a statistically significant change in a positive direction between 1976 and 1977: more North Asylum Hill residents said they walked somewhere in the neighborhood almost daily (Table 5.14). More Asylum Hill residents also said they liked to use the park near their houses, though this different was not large enough to be statistically significant.

We also looked at the pedestrian data for evidence of change in residents' use. Prior to implementation of the program, the character of pedestrian traffic was notable for the difference between the demographic characteristics of neighborhood residents and those of the people walking on the street: blacks, young adults, and teenagers were all overrepresented among the pedestrians. One indication of a positive affect on resident use of the neighborhood would be a shift in the pedestrian population to be more in accord with the characteristics of those who lived in North Asylum Hill.

Examination of the pedestrian counts yielded only inconclusive evidence on this topic. It did appear from the counts that there were more people on the streets who were over 35 than was the case in the preceding years. There were also small percentage point increases in the rate at which females and whites were observed in the pedestrian population, though those differences were so small, they may not be statistically reliable.

These data need to be interpreted with caution in any case. We cannot dissociate residents from non-residents. The methodology involves double or even triple countings of the same individuals passing through the neighborhood. We consider the survey responses on use of the neighborhood to be a much more reliable indicator than the pedestrian count data. Nonetheless, there are probably two conclusions one can reach from the pedestrian count data. First, in all probability there were more adults over 35 walking in the streets of North Asylum Hill in 1977 than in preceding years, perhaps as many as a third.

Table 5.14

FREQUENCY OF WALKING IN THE NEIGHBORHOOD DURING THE DAYTIME

	<u>1975</u>	<u>1976</u>	<u>1977</u>
<u>North Asylum Hill</u>			
Almost daily	35%	34%	49%
Few times a week	18	20	21
Once a week	10	13	10
Less often	12	18	9
Never	<u>25</u>	<u>15</u>	<u>11</u> ³
TOTAL	100	100	100
(N)	(88)	(77)	(232)
<u>Total City</u>			
Almost daily	34%	*	34%
Few times a week	24		24
Once a week	11		12
Less often	13		14
Never	<u>18</u>		<u>16</u>
TOTAL	100		100
(N)	(556)		(885)

*Data not available for this time period.

more. Second, with this exception, the characteristics of those walking in the streets appeared to be similar to those of preceding years and they continued to be different from the characteristics of the resident population of North Asylum Hill as a whole.

The most important finding in this section is that almost half of the North Asylum Hill residents said they walked someplace in the neighborhood almost daily, compared with only a third who said that in the preceding year. In addition, the odds are about 9 in 10 that residents felt better about using their neighborhood park. Overall, although all relevant measures did not change significantly, it appears almost certain that there was a positive change in the extent to which residents of North Asylum Hill used their neighborhood.

Residents' Relationships to the Neighborhood and Neighbors

A relatively long-range goal of the program was to generally improve neighborhood relations, the quality of interaction among the neighbors and the commitment of residents to the neighborhood. These changes were expected to arise over time from general improvement in the neighborhood situation. It was thought that increased use of neighborhood spaces by residents might effect some improvement in their interactions and commitment and that the presence of active community organizations might also have some impact. However, there was little evidence of progress in this respect as of the spring of 1977.

Residents were asked whether they thought the neighborhood had changed for better or worse, or stayed about the same, in the preceding year. They were also asked whether they thought it would be a better or a worse place to live five years later. In neither case was there clear evidence of an

improvement in the attitudes of North Asylum Hill residents in 1977 compared with earlier years. Although in both cases the responses in 1977 were more positive than in 1976, the differences were not large enough to be statistically significant; there was little difference between the responses in 1975 and 1977.

Respondents were also asked whether they felt "part" of the neighborhood or considered it "just a place to live". Another related question asked if neighbors were generally helpful or generally "went their own ways". The patterns were basically those observed above. The responses to both questions were more positive in 1977 than in 1976, but not statistically significantly so. There was no difference between 1975 and 1977 responses.

In earlier surveys, North Asylum Hill residents expressed higher than average concern about prostitution, drunken men hanging around, and drug abuse. Each of these perceptions related to fear of crime and would be expected to be an important component of people's feelings about the neighborhood.

During the experimental year, police made periodic efforts to control teenagers and drunken men hanging out in the neighborhood, and made at least one major effort to reduce prostitution in the area. However, their manpower shortages necessarily limited the duration and effectiveness of these efforts. Consequently, it is not surprising that residents reported no improvement in these problems. Indeed, there was a significant increase in residents' rating of the seriousness of the prostitution problem; but this almost surely is more appropriately attributed to the publicity prostitution received than to an increase in the problem itself.

In less than a year, it probably is not surprising that fundamental changes in resident attitudes toward their neighborhood did not occur.

Such changes would be expected to take time. However, they are critical

to the enduring strengthening of the neighborhood the program planners envisioned.

The fact that neighborhood problems, such as drug use and prostitution, were not seen to decline may well have an important part to play in the overall resident attitude toward the neighborhood. Moreover, such problems, in addition to being possible indicators to residents of neighborhood decay, also contribute to making the streets more frightening. Improvements might occur through police efforts, through increased resident control over the neighborhood, or through changes in the resident population. However, there was no evidence of a significant improvement in such problems in the spring of 1977.

The Relationship Between Police and Citizens

The program objective of fostering a more constructive relationship between citizens and police had three principal components. First, it was hoped that the police, through the Police Advisory Committee (PAC) and particularly through their continuous, stable working relationships with the neighborhood and residents, would become more aware of citizen concerns and more specifically committed to serving the neighborhood and residents. On the citizen side, it was hoped that the already high regard citizens held for the police would be maintained or strengthened, and residents would increasingly see police as responsive to their concerns. Third, increased communication to police about crimes and suspicious events, fulfilling the citizen role as the "eyes and ears of the police", was a desired goal. The goals were expected to be achieved as a result of increased interaction between citizens and police, as a result of citizens seeing their own priorities reflected in police activities, and from the formal working relationships that were estab-

lished with police, both through the PAC and through the other community groups.

Briefly stated, there were some striking changes in the way the police officers came to view the community and its residents between 1975 and 1977.* However, for reasons which may or may not have had anything to do with the program or the efforts of the police serving the area, the hoped-for changes in residents' orientation toward police did not come about. In fact, in some ways the residents' perceptions of and feelings about the police were more negative in 1977 than they had been in preceding years.

The improvement in the police officers' orientation to the neighborhood is well reflected in their rating of the neighborhood as a place for people to live. In 1975, 64 percent said that it had become a worse place to live in the preceding year; in 1977, only 14 percent thought it had become a worse place to live, while almost a quarter thought it had become a better place to live in the preceding year.

Police perceptions of citizen assistance to them had grown somewhat more positive during the same period. In 1977, police were more likely than previously to say that most residents would report a burglary to the police and that most residents would help the police locate a person who had committed a crime (Table 5.15). There was also some improvement in the police rating of the amount of respect citizens had for the police.

Although, remarkably enough, fewer than half of the police officers in

*The data on which the analysis of police responses are based come primarily from questionnaires completed in 1975, and again in the spring of 1977, when the police team had been in place for about 2 years. Details of the data collection methodology are to be found in Appendix A.

Table 5.15

ASYLUM HILL POLICE PERCEPTIONS OF AREA RESIDENTS
(percents)

(N)	<u>Fall, 1975</u>	<u>Spring, 1977</u>
(17)	(22)	
All or most residents would call police if saw burglary	18%	32%
All or most residents would answer questions to help police	*	23
Citizen respect for police is "very good" or "good"	24	36
Agree that area residents have a lot of say in what police do	53	73
Relations between area police and citizens "very good" or "good"	18	59

the area said they were familiar with the Police Advisory Committee, they were much more likely in 1977 to agree that the people in the area had a "lot of say" in what police did in North Asylum Hill.

The data on the overall relationship between police and citizens in Asylum Hill are well summarized in the police ratings. In 1975, over 80 percent of the police officers in Asylum Hill rated the relationships between police and citizens as "fair or poor"; in 1977 the comparable figure was only 41 percent.

Because we have no city-wide data for the police, it is not possible to fully evaluate the extent to which these changes are attributable to the program. However, there can be no doubt that in the year and a half since the first questionnaires were completed there was a considerable improvement in police perceptions of the neighborhood and particularly of their relationships with the citizens in the neighborhood.

The data from the citizen surveys present an interesting contrast. Three key measures were citizen ratings of how quickly police respond to calls for help; how well they do in protecting people in the neighborhood, and how well they treat people in the neighborhood. On all three measures, there was a statistically significant decline in the rate at which police received high ratings (Tables 5.16-5.18). In two cases, the change occurred between 1975 and 1976; in the third, it occurred between 1976 and 1977.

With respect to cooperation with the police, significantly more North Asylum Hill residents thought all or most of their neighbors would call the police if they saw a burglary in 1977 than said so in the preceding year. However, there was a decline in the perceived likelihood that neighbors would help police locate a person who had committed a crime. There was no change in the rate at which people said they would report an attempted burglary of

Table 5.16
PERCEPTION OF POLICE RESPONSE TIME WHEN SOMEONE
IN NEIGHBORHOOD CALLS FOR HELP

	<u>1975</u>	<u>1976</u>	<u>1977</u>
<u>North Asylum Hill</u>			
Come right away	72%	49%	53%
Take a while	9	25	26
Don't know	<u>19</u>	<u>26</u>	<u>21</u>
TOTAL	100	100	100
(N)	(86)	(74)	(232)
<u>Total City</u>			
Come right away	60%	*	56%
Take a while	19		24
Don't know	<u>21</u>		<u>20</u>
TOTAL	100		100
(N)	(554)		(865)

*Data not available for this time period.

Table 5.17

RATING OF JOB HARTFORD POLICE DEPARTMENT DOES
PROTECTING PEOPLE IN THE NEIGHBORHOOD

	<u>1975</u>	<u>1976</u>	<u>1977</u>
<u>North Asylum Hill</u>			
Very good	27%	14%	21%
Good enough	53	47	40
Not so good	13	25	28
Not good at all	<u>7</u>	<u>14</u>	<u>11</u>
TOTAL	100	100	100
(N)	(80)	(70)	(216)
<u>Total City</u>			
Very good	29%	*	19%
Good enough	45		53
Not so good	18		22
Not good at all	<u>8</u>		<u>1</u>
TOTAL	100		100
(N)	(523)		(816)

*Data not available for this time period.

Table 5.18

PERCEPTION OF HOW HARTFORD POLICE TREAT PEOPLE IN NEIGHBORHOOD

	<u>1975</u>	<u>1976</u>	<u>1977</u>
<u>North Asylum Hill</u>			
Very well	30%	28%	25%
Well enough	56	54	44
Not so well	12	9	22
Not well at all	<u>2</u>	<u>9</u>	<u>9</u>
TOTAL	100	100	100
(N)	(77)	(64)	(202)
<u>Total City</u>			
Very well	36%	*	27%
Well enough	48		55
Not so well	11		12
Not well at all	<u>5</u>		<u>6</u>
TOTAL	100		100
(N)	(496)		(786)

*Data not available for this time period.

their property to police. There also was no change in the rate at which actual burglaries were said to have been reported to the police. Indeed, there was no change in the rate at which North Asylum Hill residents had called the police for any reason in 1977 compared with earlier years.

Thus, there was one measure that showed some increase in the perceived cooperation between citizens and police. However, for the most part, ratings of the police had declined since 1975, and there was no evidence of an increased level of actual cooperation by residents in helping the police to do their job.

There also was no improvement in the extent to which citizens saw police as responsive to their concerns. Part of the problem may well have been the fact that only 30 percent of North Asylum Hill residents had ever heard of the Police Advisory Committee. To the extent that the program expected this committee to give residents a sense of control over police activities, there was little hope that this little-known group would have that effect. It may not be surprising, then, that there was no change in the rate at which residents agreed that people in the neighborhood had a "lot of say" in what police do (Table 5.19). There also was no change in residents' agreement that police try to do what is best for residents; compared with 1975, there were more residents who agreed that police did not spend their time on residents' problems.

It has been difficult for the evaluation team to identify the reasons for these findings. Because the general orientation of Asylum Hill residents to police was extremely positive prior to the program, there was no reason to expect major positive changes. The area in which change would have been most needed and desired was in calling the police to report victimization or suspicious activities. However, the fact that a significant number of ratings

Table 5.19

PERCENT WHO AGREE WITH STATEMENTS ABOUT POLICE-CITIZEN RELATIONS

	<u>1975</u>	<u>1976</u>	<u>1977</u>
<u>North Asylum Hill (N)</u>	(88)	(76)	(232)
People in the neighborhood have a lot of say in what police do	38%	35%	34%
Police try to do what's best for neighborhood residents	79	82	67
Police don't spend time on problems that people in the neighborhood care about	32	45	43
<u>Total City (N)</u>	(535)		(885)
People in the neighborhood have a lot of say in what police do	38%	*	32%
Police try to do what's best for neighborhood residents	80	*	77
Police don't spend time on problems that people in the neighborhood care about	34	*	34

*Data not available for this time period.

actually showed a decline requires some further explanation.

One possible explanation stems from the reduction in manpower in the area. In fact, the perception of police presence was considerably reduced since 1975 (Tables 5.20-5.21). Seeing policemen has been shown before to be one of the things citizens want most; a reduction in the rate at which police were seen on the streets may somehow have contributed to a reduced sense of their effectiveness.

Another possibility stems from analysis of the data separately by race. In Hartford, as in most other major cities that have been studied, blacks have consistently been more negative towards the police than whites, though it should be pointed out that blacks in Hartford have tended to be more positive than blacks in other cities for which comparable data are available.² Although the number of cases on which the analysis is based is small, there is a clear trend for almost all police-related questions to have shown a marked decline for the black respondents, while showing no change for white respondents. In most cases, the effect of this was to make blacks in North Asylum Hill, who were distinctively positive about police in 1975, look more like the black community throughout Hartford. In reviewing a variety of alternative hypotheses, it is difficult to escape the conclusion that, since 1975, the views of black residents of North Asylum Hill on the police have changed.

There are, in turn, two possible explanations for this change. First, there may have been some change in the way the Asylum Hill Police Team related to black residents in Asylum Hill.

A second explanation seems more likely. Since 1973, there has been considerable turnover and increase in the black population in North Asylum Hill. Although the size of that population has remained fairly stable since

Table 5.20
FREQUENCY OF SEEING HARTFORD POLICE PATROLLING THE
NEIGHBORHOOD ON FOOT

	<u>1975</u>	<u>1976</u>	<u>1977</u>
<u>North Asylum Hill</u>			
Several times a day to almost every day**	23%	12%	5%
A few times a week to a few times a month**	21	12	12
Almost never	<u>56</u>	<u>76</u>	<u>83</u>
TOTAL	100	100	100
(N)	(87)	(73)	(232)
<u>Total City</u>			
Several times a day to almost every day**	6%	*	4%
A few times a week to a few times a month**	9		7
Almost never	<u>85</u>		<u>89</u>
TOTAL	100		100
(N)	(548)		(885)

*Data not available for this time period.

**Combined response categories.

Table 5.21

• FREQUENCY OF SEEING HARTFORD POLICE PATROLLING
NEIGHBORHOOD IN A VEHICLE OR MOTOR SCOOTER

	<u>1975</u>	<u>1976</u>	<u>1977</u>
<u>North Asylum Hill</u>			
Several times a day to almost every day**	82%	83%	69%
Few times a week to a few times a month**	13	15	26
Almost never	<u>5</u>	<u>2</u>	<u>5</u>
TOTAL (N)	100 (86)	100 (75)	100 (232)
<u>Total City</u>			
Several times a day to almost every day**	60%	*	44%
Few times a week to a few times a month**	27		38
Almost never	<u>13</u>		<u>18</u>
TOTAL (N)	100 (545)		100 (885)

*Data not available for this time period.

**Combined response categories.

1975, a high proportion of black North Asylum Hill residents in 1977 had recently moved there from other parts of the city. The average length of residence in their current home for blacks in North Asylum Hill was less than two years. It may well be that the ratings of these respondents reflect their experiences in other parts of Hartford rather than actual experiences with the Asylum Hill team. In that case, as that community stabilizes over time, there is basis for expecting a positive change.

In conclusion then, for whatever reasons, there is no basis for saying that a more positive feeling by residents toward the police was achieved by the program. However, we did note a number of positive changes in the police orientation to the residents.

Offenders and Residents

One principal goal of the program was to increase the extent to which neighborhood residents themselves took control of the neighborhood and played an active role in opportunity reduction. There was some evidence that some significant progress was made in this respect.

When survey residents were asked what they thought their neighbors would do if they saw something suspicious, about a third of North Asylum Hill residents said they thought they would ignore it. This is roughly the same rate at which that response was given in previous years. Similarly, when asked how concerned the neighbors were with preventing crime from happening to others in the neighborhood, the perceptions of North Asylum Hill residents were not different in 1977 than they had been in preceding years. It appears that when asked questions about their neighbors in general, North Asylum Hill residents were not different in 1977 than they had been in preceding years. However, the answers to two other questions give a somewhat different picture.

Respondents were asked whether they had any routine arrangements with neighbors to watch their house when they were away. Such arrangements were reported to be twice as common in 1977 as in any previous year (Table 5.22). Such a change is clearly an example of residents taking responsibility for one another, which this program was designed to promote.

Another important question dealt with the ease of stranger recognition. One important component of the analysis of the problem in North Asylum Hill was the difficulty that residents had in differentiating strangers from residents. In 1977, there was a statistically significant improvement in residents' ratings of the ease of identifying a stranger (Table 5.23). Moreover, the change can clearly be linked to the increase in resident use of the neighborhood: the more respondents reported walking in the neighborhood, the more likely they were to say that they easily could recognize a stranger (Table 5.24).

Thus, while there was no evidence that North Asylum Hill residents saw their neighbors generally to be more concerned or more helpful in controlling crime, they were more likely than in the past to have made individual arrangements for mutual protection and they felt an improved ability to identify strangers, which was a crucial link in residents' taking control of their own neighborhoods.

Offenders and the Physical Environment

We have relatively little evidence about the way that offenders used the physical environment once the program was implemented. One key observation at the time the neighborhood was initially analyzed, however, was that an unusual number of street crimes occurred on side streets. This was in contrast to the more common patterns, where street crimes are most likely to

Table 5.22

FREQUENCY OF MAKING ARRANGEMENTS WITH NEIGHBORS TO WATCH
EACH OTHERS' HOUSES

	<u>1975</u>	<u>1976</u>	<u>1977</u>
<u>North Asylum Hill</u>			
All the time	17%	14%	26%
Special occasions	25	21	16
No special arrangements made (or type not ascertained)	<u>58</u>	<u>65</u>	<u>58</u>
TOTAL	100	100	100
(N)	(88)	(77)	(232)
<u>Total City</u>			
All the time	32%	*	30%
Special occasions	21		25
No special arrangements made (or type not ascertained)	<u>47</u>		<u>45</u>
TOTAL	100		100
(N)	(556)		(885)

*Data not available for this time period.

Table 5.23

EASE OF STRANGER RECOGNITION IN NEIGHBORHOOD

	<u>1975</u>	<u>1976</u>	<u>1977</u>
<u>North Asylum Hill</u>			
Pretty easy	26%	25%	32%
Pretty hard	<u>74</u>	<u>75</u>	<u>68</u>
TOTAL	100	100	100
(N)	(88)	(76)	(223)
<u>Total City</u>			
Pretty easy	48%	*	53%
Pretty hard	<u>52</u>		<u>47</u>
TOTAL	100		100
(N)	(556)		(855)

*Data not available for this time period.

Table 5.24

EASE OF STRANGER RECOGNITION IN NEIGHBORHOOD BY
FREQUENCY OF WALKING IN NEIGHBORHOOD FOR NORTH
ASYLUM HILL RESIDENTS, 1977

<u>Ease of Recognizing Strangers in Neighborhood</u>	<u>Frequency of Walking in Neighborhood</u>	
	<u>More Than Once a Week</u>	<u>Once a Week or Less</u>
Pretty easy	38%	19%
Pretty hard	<u>62</u>	<u>81</u>
Total	100%	100%
(N)	(159)	(63)

occur on main streets. The fact that offenders found opportunities on residential streets was a sign of the impersonal character of the neighborhood. An important indicator of program success would be evidence that offenders no longer felt comfortable committing crimes on residential streets.

Police record data were examined to trace the ratio of main street to side street crimes. As we discussed in the section on street crime patterns, there was a significant shift in the distribution of street crime during the experimental year (Table 5.3). The pattern which was established over several years of having the majority of street crimes occurring on side streets was reversed in North Asylum Hill during 1976-1977. This is a potentially critical indication of program success.

The only problem is that a similar shift in street crime occurred in South Asylum Hill where there were no street changes, though this shift was less extreme than in North Asylum Hill.

There are two possible explanations. One is that the street observer programs, which operated in the summer in North Asylum Hill and South Asylum Hill, were responsible for the shift. A variation is that the South Asylum Hill shift was due to the street observers, and the more extreme shift in North Asylum Hill was due to a combination of factors: the street observers and the physical changes. Whichever explanation one accepts, there was a shift in street crime away from side streets in North Asylum Hill; and that is an important change in the pattern of crime in that area.

Offenders and Police

A program objective was that police, through their increased knowledge of the neighborhood and the environment, would be better able to deter offenders by deploying resources more effectively and would, perhaps, with better

response time and better cooperation from citizens, be more likely to apprehend them. As has been discussed previously, cuts in manpower actually decreased the ability of police to patrol the neighborhood. Citizen interviews indicated that they perceived significant decreases in the police presence in 1976 and 1977, compared with 1975.

Yet the police themselves perceived a marked improvement in their performance between the fall of 1975 and the spring of 1977. When asked to rate their overall efforts to cut down on crime, over 60 percent said it was good in 1977, compared with 24 percent in 1975 (Table 5.25). Similarly, almost 80 percent rated their rate of clearing cases as "good" in 1977 compared with less than 50 percent in 1975. With respect to both burglary and robbery, police were much less likely to rate it as "big problem" in 1977 compared with 1975 (Tables 5.26-5.27). However, it is interesting to note that the same trend occurs in the other team in District 5 which operated in Clay Hill/SAND.

Asylum Hill police also thought the two main targets of their efforts, teenagers and drunken men hanging around, were significantly less of a problem by the spring of 1977 than they had been before. They still regarded prostitution as a "big problem", possibly because it has been a recurrent one. As we have noted previously, however, residents did not perceive reductions in any of these problems.

The only objective data we have on police performance is the number of arrests. It appears in Table 5.28 that the number of persons arrested increased markedly between 1975 and 1976, the first year the team was in place; and the number increased again slightly during the evaluation year. Although we lack data on dispositions to know the extent to which these arrests resulted in convictions and in taking offenders off the street, the rates constitute some evidence that the team was being more successful in apprehending

Table 5.25

ASYLUM HILL POLICE RATINGS OF SUCCESS OF POLICE EFFORTS

(percent)

	<u>Fall 1975</u>	<u>Spring 1977</u>
<u>"Very good" or "good" at**:</u>		
Cutting down crime in team area	24%	64%
Clearing cases	44	78
(N)	(17)	(22)

**As opposed to "fair" or "poor".

Table 5.26

POLICE PERCEPTION OF BURGLARY AS A CRIME PROBLEM IN
THEIR TEAM AREA

	<u>Fall, 1975</u>	<u>Spring, 1977</u>
<u>Asylum Hill</u>		
Big problem	94%	68%
Some problem	6	32
Almost no problem	<u>0</u>	<u>0</u>
TOTAL	100	100
(N)	(17)	(22)
 <u>Clay Hill/SAND</u>		
Big problem	88%	46%
Some problem	12	54
Almost no problem	<u>0</u>	<u>0</u>
TOTAL	100	100
(N)	(24)	(13)

Table 5.27

POLICE PERCEPTION OF STREET ROBBERY AS A CRIME PROBLEM
IN THEIR TEAM AREA

	<u>Fall, 1975</u>	<u>Spring, 1977</u>
<u>Asylum Hill</u>		
Big problem	82%	41%
Some problem	18	59
Almost no problem	<u>0</u>	<u>0</u>
TOTAL	100	100
(N)	(17)	(22)
<u>Clay Hill/SAND</u>		
Big problem	62%	25%
Some problem	38	67
Almost no problem	<u>0</u>	<u>8</u>
TOTAL	100	100
(N)	(24)	(12)

Table 5.28

NUMBER OF ARRESTS FOR RESIDENTIAL BURGLARY
AND STREET ROBBERY IN ASYLUM HILL

	<u>1975</u> **	<u>1976</u> **	<u>1977</u> **
<u>North Asylum Hill</u>			
Residential burglary	30	57	58
Street robbery	5	37	40
<u>South Asylum Hill</u>			
Residential burglary	10	14	20
Street robbery	2	15	41
<u>Total Asylum Hill</u>			
Residential burglary	40	71	78
Street robbery	7	52	81

**"1975" includes the period July, 1974 through June, 1975; "1976" includes the period July, 1975 through June, 1976; "1977" includes the period July, 1975 through June, 1977.

offenders.

Police and the Environment

The program goal was to structure the physical environment in such a way that it would make the task of the police easier! In addition, one of the advantages of having police who were geographically stable was that they would become familiar with their environment, as familiar as offenders.

As was discussed in Chapter IV, the average police officer in Asylum Hill did not understand the street changes and did not see them as aiding his work. Not a single officer responded on the police questionnaire that he thought the street changes were a "good idea". Outside observation of police patrol suggested that they avoided the closed streets.

Nonetheless, it is not possible to say that the police did not benefit from knowledge of the physical environment or even from the street changes themselves. The burglary and robbery squads did map patterns of street, crime and burglary and attempted to deploy their resources strategically to reduce opportunities. Almost certainly, the officers operating on the team were more familiar with the physical environment and escape routes than was the case when a city-wide force was attempting to patrol Asylum Hill. Finally, even the officers' avoidance of closed streets inadvertently produced the effect anticipated by the program designers: that police resources would be concentrated on main streets.

Despite these points, the fact that the police did not like the street changes is dominant. They viewed enforcement of the traffic patterns as a problem. They saw their own mobility restricted. (They had to obey the restrictions except in emergencies.) They did not generally accept the concept that quiet streets had anything to do with crime. We do not fully

understand why their resistance was so total; but it was.

Conclusion: Impact of the Integrated Program

At the beginning of this chapter, we presented what appeared to be clear evidence that burglary in North Asylum Hill had gone down and a pattern of rising street crime against North Asylum Hill residents had at least been halted. Moreover, North Asylum Hill residents perceived themselves to be less likely to be burglary victims than in the past and saw burglary as less a problem than in the past, while their concerns about street crime had at least stabilized.

Since reduction of crime and fear were the program goals, it can be said that the program goals were achieved. However, it is also important to understand how and why the observed improvements occurred.

Significance of Program Components

The basic concept of the program was that the physical design, police and community organization components of the program were all essential. Because of the complementarity conceived among these components, it is difficult to dissociate the affects of one from the others. However, something can be said about the significance of each.

Assigning police to the area on a non-rotating basis almost certainly was a factor in the increased arrests for robbery and burglary. It almost certainly was important in the improvement in police attitudes towards residents as well. In addition, there was evidence of a shift in police priorities. The anti-prostitution efforts, the efforts to control the use of the parks and the time and effort invested in traffic control as part of the implementation of the street changes were all indications of a police unit that was trying to be responsive to residents. The quality of the police

leadership, in combination with the existence of the Police Advisory Committee and frequent meetings with the Hartford Institute staff, were probably responsible for this responsiveness.

Community organizations were essential to the implementation of the program. They provided a mechanism for residents to participate in planning the physical changes and for relating to the police in an organized way. As is the case with almost all community organization efforts, only a small percentage of North Asylum Hill residents actually belonged to these organizations. However, many more residents were no doubt affected by activities they initiated, such as block parties, pot luck dinners and neighborhood clean-ups. Such activities clearly supported the project goals of building a sense of neighborhood, getting residents together and increasing resident cohesion. The youth recreation and housing development programs initiated by community organizations may prove, in the long run, to be of even more value, though the short-term affects could not be assessed.

The police and community organization components, then, certainly contributed to the achievement of the program goal. However, alone they were not enough to reduce crime and fear. The physical changes were essential. We are able to make that statement because of two natural experiments that occurred.

First, in North Asylum Hill, the police and community organization components were in place for more than a year before physical construction began. Indeed, there were more police in North Asylum Hill in 1975-1976 than in the experimental year. However, it was only when the physical changes were made that a decline in crime and fear was observed.

The experience in South Asylum Hill provides another test of the importance of the street changes. This area was served by the same police unit

that worked in North Asylum Hill. Moreover, the community organizations, while possibly more active in North Asylum Hill than South Asylum Hill, were certainly active in South Asylum Hill as well. One of the three major community organizations with which the Hartford Institute worked was composed mainly of South Asylum Hill residents. The most active citizen block watch effort was in South Asylum Hill.

Comparing North and South Asylum Hill in 1976-1977 shows that street crime probably rose in South Asylum Hill while burglary was stable. There was no evidence of a significant decline in any major kind of crime or in fear, as was observed in North Asylum Hill.

Thus, if the program succeeded in North Asylum Hill, we must conclude that the physical changes were essential to that success.

The Case for Causality

Finally, we need to address directly the question of how the program worked and if, indeed, it was the program that produced the changes observed. In essence, this was a program designed to enable and encourage the residents themselves to begin to reduce opportunities for crime. By giving them back their streets, it was hoped that they would start to use the neighborhood more. This, in turn, would permit more surveillance and change the ratio of residents to non-residents, which might make interior residential streets less attractive to potential offenders.

It would be easier to understand how the program worked if there were more evidence that residents "did something". If they had called the police more, if they had reported more active intervention in suspicious events, the casual reader would probably more easily believe in the program results. These things did not happen. Rather, the evidence is considerably more subtle.

People did begin to use their streets more. Almost half said that they walked somewhere in the neighborhood daily, compared to a third in earlier years. They started to feel that they could more easily recognize strangers and differentiate residents from non-residents. A minority, about 20 percent, but a substantially larger minority than in the past, began to make mutual arrangements for watching neighbors' homes.

These all are the kinds of changes that the program designers had hoped for. They are small changes. They are subtle changes. They do not require a lot of energy or constitute some kind of major turnaround in residents' orientations to the neighborhood or to crime. They are the kind of changes that might endure.

The critical question is whether it is possible that these changes, as measured, could constitute a large enough impact on the neighborhood environment to make would-be offenders avoid the residential streets of North Asylum Hill. We do not have interviews with offenders, which might be helpful in pinning down this point. We do have two clear facts: the burglary rate in North Asylum Hill was approximately half of what one would have expected and the street crime in North Asylum Hill showed a major shift from residential side streets onto main streets.

With only one experiment to evaluate, it is difficult to reach a definitive conclusion that will withstand all criticism. Based on the data in this chapter about the program, however, one can say that there was evidence of increased opportunity for surveillance (more use of the neighborhood streets), increased ability to control the neighborhood (improved recognition of strangers), and an increased interest in crime control. These occurred when

the program, including the street changes, was fully implemented. Moreover, the real targets of the program, crime and fear, decreased simultaneously. There are alternative hypotheses, and these will be examined in Chapter VI. However, based on the evidence in this chapter, one conclusion seems considerably more plausible than any other: that the program accomplished what it was designed to do, at least for a year.

CHAPTER VI

OTHER DEVELOPMENTS THAT COULD HAVE AFFECTED PROGRAM IMPACTS. 1973-1977

Introduction

Because social experiments such as the Hartford Project are carried out in a complex, dynamic, urban setting, they cannot be as "clean" as laboratory experiments. It is not possible to control all events or developments not part of the experiment that might affect its outcome.

In Chapter V, we presented evidence that crime and fear of crime were reduced in North Asylum Hill and that other changes occurred in resident behavior and in police attitudes and effectiveness which were consistent with the hypothesis that the program was responsible for the observed improvement. In a program evaluation, however, it is necessary to explore the possibility that changes other than the program itself affected the observed results. In assessing alternative hypotheses, three criteria must be applied:

1. The observed change was likely to have affected residential burglary and, to a lesser extent, street robbery;
2. It was likely to have had a distinctive impact on crime and fear in North Asylum Hill; and
3. It could have accounted for a marked change in crime and fear in 1976-1977.

During the course of the project, an attempt was made to keep careful track of events in Hartford that might affect program outcomes. The possible events will be discussed in three categories: changes in the population in North Asylum Hill; other changes in and around North Asylum Hill that might have affected criminal opportunities, and changes which might have affected the number or behavior of potential offenders working in North Asylum Hill.

Population Changes

In many respects, the characteristics of the population of North Asylum Hill remained constant from 1973 through June, 1977 (Table 6.1). For example, the population was relatively transient, with about forty percent having lived there less than two years. The rates of families with children, single-person households and households that rent all were stable during this period, with only minor fluctuations from year to year.

There were, however, two changes in the population which should be noted. The racial composition of North Asylum Hill might be important to neighborhood dynamics. A program with a goal of getting neighbors to work together could be affected by significant changes in racial composition. In 1973, more than half the residents in North Asylum Hill were white, with the balance being black or Spanish (Table 6.2). By 1975, these proportions had changed so that only 40 percent of the population was white, about 46 percent black and the other 14 percent Spanish. However, this change in racial composition stopped in 1975. The figures for 1977 are nearly identical with those of 1975. Thus, although there was a significant change in the racial composition of the neighborhood between the time of the neighborhood analysis and the time the program was implemented, the fact that the racial population stabilized in 1975 ruled this change out as a determining factor in the observed changes during the experimental year.

The other population change of possible significance in North Asylum Hill is an apparent reduction in median income between 1976 and 1977 (Table 6.3). These figures are a bit less stable than the others for two reasons. First, we have only income data for those who had lived in their particular

Table 6.1

SELECTED CHARACTERISTICS OF RESIDENTS AND HOUSEHOLDS

	<u>1973</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>
<u>North Asylum Hill</u> (N)	(93)	(88)	(77)	(229)
Percent lived at address less than two years.	33%	44%	37%	46%
Percent household heads:				
Under 40, single	36	43	39	43
Minor children in household	16	19	17	18
65 or older	23	11	17	15
Percent one-person households	61	49	60	57
Home tenure of households:				
Own home	7	7	11	4
Owner occupied rental	*	10	10	6
Other rental	93**	83	79	90
<u>Total City</u> (N)	(885)	(552)	*	(872)
Percent lived at address less than two years	20%	22%		23%
Percent household heads:				
Under 40, single	11	11		13
Minor children in household	32	42		40
65, or older	20	18		17
Percent one-person households	30	27		27
Home tenure of households:				
Own home	22	30		28
Owner occupied rental	*	21		24
Other rental	78**	49		48

*Data not available for this period.

**Represents all rental housing; distinction between "owner occupied" and "other" rental not made in 1973.

Table 6.2

ETHNIC OR RACIAL BACKGROUND

	<u>1973</u>	<u>1975</u>	<u>1977</u>
<u>North Asylum Hill Adjusted***</u>			
White	55**	40%	35%
Black	35	46	48
Hispanic	10	14	16
Other	—	—	1
Total	100	100	100
(N)		(131)	(276)

Total City Adjusted***

White		48%	51%
Black		36	35
Hispanic	*	16	13
Other		—	1
Total		100	100
(N)		(690)	(1016)

- Less than 0.5 percent.

* Data not available for this time period.

** These figures are estimated adjustments since data not available on "ineligible" households.

*** Includes persons who had lived at address for less than six months (who were not eligible for full interview).

Table 6.3

TOTAL FAMILY INCOME**
(for previous year)

	<u>1973</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>
<u>North Asylum Hill</u>				
Less than \$5,000	31%	20%	27%	30%
\$5,000-\$9,999	38	32	21	35
\$10,000-\$14,999	21	30	31	19
\$15,000 or more	<u>10</u>	<u>18</u>	<u>21</u>	<u>16</u>
Total*	100	100	100	100
(N)	(84)	(84)	(67)	(217)
Median	\$7,200	\$9,700	\$10,400	\$7,900
<u>Total City</u>				
Less than \$5,000	35%	30%		29%
\$5,000-\$9,999	36	33	*	29
\$10,000-\$14,999	20	23		21
\$15,000 or more	<u>9</u>	<u>14</u>		<u>21</u>
Total	100	100		100
(N)	(769)	(513)		(805)
Median	\$6,700	\$7,800		\$8,400

*Data not available for this period.

**Based only on households with adults having lived there at least six months.

house or apartment for at least 6 months.* Second, as is the case in most surveys, 10 to 15 percent of respondents did not answer the question about their income level. In any case, we thought a possible change in income level was sufficiently important so that we should explore the issue further.

Income is important because in any given neighborhood, including those with low incomes, people with higher incomes are, on the average, burglarized more often than those with low incomes. Thus it seems possible that a higher proportion of low income people in North Asylum Hill produced a neighborhood that was less attractive to burglars.

In order to explore this possibility, we looked at the burglary rates only for those persons whose incomes over the period from 1975-1977 was higher than \$7,000 per year. Although \$7,000 is not necessarily a high income by current standards, we set the income level there in order to have sufficient cases for reliable figures. We thought that it would be an adequate control for measuring the effects of significant changes in the proportion of people with very low incomes.

The results suggest that the changing income of the population in North Asylum Hill had no effect on the evaluation results. It can be seen in Table 6.4 that the burglary rates for families with incomes of \$7,000 or higher followed the pattern for North Asylum Hill as a whole, showing a sharp reduction between 1976 and 1977.

*One of the effects of this criterion, which was designed to establish a stable burglary rate, was to render a relatively high proportion of black and Spanish residents ineligible in 1975 and 1976 because they had only recently moved to the neighborhood. By 1977, a significantly higher percentage of blacks and Spanish residents met the eligibility criterion. Therefore, there is reason to believe that the change in income occurred not between 1976 and 1977 but rather occurred earlier than that, with the change in ethnic composition in the neighborhood. However, it was only in 1977 that the change in income level showed up in our "eligible" sample.

Table 6.4

BURGLARY VICTIMIZATION FOR HOUSEHOLDS WITH
ANNUAL INCOMES OF \$7,000 OR MORE
(per 100 households)

	<u>1975</u>	<u>1976</u>	<u>1977</u>
<u>North Asylum Hill</u>	16.9	31.7	10.9
(N)	(84)	(41)	(129)
<u>Total City</u>	14.7	*	20.4
(N)	(204)		(446)

*Data not available for this time period.

In conclusion, then, we were unable to find any convincing evidence that changes in the population in North Asylum Hill had a significant effect on the evaluation or on the conclusions.

Other Opportunity Reduction Strategies

We searched for other factors not part of the Hartford Crime Control Program that might have affected opportunities in the North Asylum Hill area. One possibility was an increase in the physical security of buildings. Although the program did not discourage installation of special locks or other security devices in homes and buildings, such changes were not part of the conception of the program. The examination of survey data, however, revealed no indication of an increase in alarms or special locks or other devices that might make entry into buildings more difficult (Table 6.5).

Were homes or apartments being left vacant less often? One of the preconditions for most burglaries is an empty house or apartment. However, survey data gave no indication that people were staying home more in 1977 than they had previously (Table 6.5).

Opportunities for street robbery could have been affected if individuals were taking precautions they had not taken previously. We have already seen evidence that residents were walking more frequently on neighborhood streets during the day. There is also evidence that the practice of carrying protective devices increased significantly between 1975 and 1977 (Table 6.5). For the most part, these were weapons (especially knives) rather than warning devices. Although some community organizations had encouraged residents to carry warning devices, they had not advocated carrying weapons.

One additional factor that could have affected opportunities was the weather. The winter of 1976-1977 was one of the most severe on record. The presence of snow may have reduced opportunities for crime. However, of course,

Table 6.5

USE OF PROTECTIVE DEVICES AND EXTENT TO WHICH HOME
IS VACANT DURING THE DAY

	<u>1975</u>	<u>1976</u>	<u>1977</u>
<u>North Asylum Hill (N)</u>	(88)	(76)	(232)
Percent of homes protected by:			
Special locks or other devices	61	58	47
Engraving of valuables	24	15	19
Other means	26	15	19
Percent of residents who carry protection when walking in neighborhood	5	11	18
Mean number of days no one is home	4.6	3.9	4.0
Mean number of hours per day no one is home, if any	6.8	6.6	7.0
<u>Total City (N)</u>	(556)	*	(885)
Percent of homes protected by:			
Special locks or other devices	50	*	50
Engraving of valuables	15	*	13
Other means	16	*	21
Percent of residents who carry protection when walking in neighborhood	9	*	8
Mean number of days no one is home	2.6	*	2.8
Mean number of hours per day no one is home, if any	5.8	*	5.8

*Data not available for this time period.

the weather was the same throughout Hartford and would not have had a distinctive effect on crime in North Asylum Hill.

Thus, we were unable to find evidence that there were changes in opportunities for burglary that would have distinctively affected North Asylum Hill, other than those that were part of the program described in Chapter V. The increase in carrying protective devices on the street was not a part of this program. We do not know what effect this had on street robbery, if any.

Possible Changes in the Offender Population

Offender-Oriented Programs

A serious problem in this evaluation is producing a judgement about whether there were changes in the number or in the behavior of the offender population which would have affected North Asylum Hill. It is serious because the effects of changes in offenders are difficult to dissociate from the effects of a program designed to reduce opportunities. Moreover, reliable information about offenders and their behavior is hard to come by.

There were three programs operating in Hartford at some time between 1973 and 1977 that might have had some impact on criminal offenders. In addition, there were two other significant events which might have affected offenders working in North Asylum Hill. Let us consider each of them.

The Maverick Program. Maverick is a supported work program for former offenders and youths in trouble with the law. Because it operated city-wide, did not focus on burglars in particular, and because of the numbers involved, it does not seem a plausible cause of the observed changes.

The premise behind the program is that providing people with the skills necessary to enable them to compete in the labor market will reduce

their involvement in criminal activity.

Maverick was incorporated in Hartford in May, 1975 and accepted its first workers the following August, approximately one year after the Hartford project began implementation. Since then it has employed a total of 444 persons, 405 of whom had been convicted offenders or young persons arrested and charged with a crime. Of the total, Maverick has fired 24 percent for various reasons including illegal activities and poor work performance. It has retained or passed on to other employment almost 75 percent. As of June, 1977, the program employed 225 persons.

Formal evaluation of Maverick will not be completed until 1979; hence firm evidence as to its effect on offender behavior is not available. Preliminary data have indicated that the recidivism rate is lower for Maverick employees than would have been expected without the program. Using their early figures, however, one could only project fewer criminals of all types (not just burglars or robbers) in Asylum Hill; and there is no basis for projecting a greater effect on Asylum Hill offenders than those operating elsewhere in the city.

The Hartford Dispensary. The Hartford Dispensary Methadone Maintenance Program has been in existence since 1971. The program is a standard methadone program offering methadone, counseling and referrals for jobs. Except for a slight increase in population, the program has remained substantially unchanged during the life of the residential crime control project. Between March, 1973 and March, 1977, the population has increased from 306 active clients to 367, an increase of 20 percent spread about evenly over the four-year period. Because the Dispensary draws not only from the City of Hartford but from the suburbs as well, population increases must reflect increased intake from the entire greater Hartford area. There is no reason to believe

it would have distinctively affected North Asylum Hill during the 1976-1977 evaluation year.

The Community Resources for Justice Juvenile Program. In 1976, the Hartford Institute conceptualized, planned and began the implementation of a program to intervene in the criminal behavior of seriously delinquent children in Hartford. The program is operated by the Community Resources for Justice, Inc. Because of conditions in the grant, children residing in Asylum Hill are not eligible for inclusion. Children residing just north of that area are eligible, and many of their crimes may have been committed in Asylum Hill.

This program cannot be considered a significant variable in the evaluation of the crime control project. The program for juveniles encountered start-up difficulties which delayed the acceptance of clients into the program until March of 1977. As of June, 1977, there were only eight participants in the program; hence, client numbers were too small and the time in the program too short for any measurable impact.

Offender Movement

In the period 1971-1973, about a third of those arrested for committing robbery or burglaries in Asylum Hill lived in the Clay Hill/South Arsenal area of Hartford. They were particularly likely to live in Bellevue Square, a public housing project.

In 1975, Bellevue Square was "thinned out". About a third of the housing units were demolished. In addition, between 1975 and 1977, there were significant abandonment and demolition of housing throughout the Clay Hill/South Arsenal area. Figures based on our survey experience suggest that some 10 percent of the housing units in that area in 1975 were no longer available for housing in 1977 (Table 6.6).

Table 6.6

PERCENT OF SAMPLE ADDRESSES WHERE HABITABLE HOUSING NOT FOUND

	<u>1975</u>	<u>1976</u>	<u>1977</u>
Asylum Hill	-	-	5
(N)	(339)	(338)	(640)
North Asylum Hill	1	-	7
(N)	(194)	(193)	(422)
South Asylum Hill	-	-	2
(N)	(145)	(145)	(218)
Clay Hill/South Arsenal	3		10
(N)	(202)		(182)
Adjacent	-	*	3
(N)	(213)		(330)
Remainder	2	*	1
(N)	(233)		(347)
Total City	1	*	4
(N)	(987)		(1499)

-Less than 0.5 percent

*Data not available for this time period.

These two changes necessarily meant a considerable amount of relocation for residents of Clay Hill/South Arsenal, including relocation of offenders, no doubt. Places with comparable housing at comparable prices were located near North Asylum Hill. However, there were several other places in the City of Hartford further from North Asylum Hill that could also offer comparable housing.)

It is difficult to assess the extent to which this kind of mobility may have affected the offender population working in North Asylum Hill. One clue we have provides a somewhat confusing picture. The place of residence of persons arrested for burglary and robbery in North Asylum Hill was tabulated on a year-to-year basis. In some years, the number of cases was small, so the figures are not particularly reliable. It is also impossible to know how these figures might have been affected by the introduction of a neighborhood police team prior to the evaluation year. Given these caveats, however, the data do suggest some fluctuations in residence of offenders known to have committed burglaries in North Asylum Hill. In 1975, there was a significant change, with the majority of burglary offenders being residents of North Asylum Hill (Table 6.7). This was very different from the situation in 1973, when almost all known burglary offenders, as well as robbery offenders, lived outside of Asylum Hill. This percentage dropped sharply in 1976 and returned to the 1973 level by 1977. However, the residence of burglary offenders differed from earlier patterns in two respects. First, in 1977, fewer known burglars resided in Clay Hill/South Arsenal than previously. Second, there was some increase in the number of offenders who lived in the northwest corner of Hartford. There had been almost no offenders from this area in the past.

Table 6.7

RESIDENCE OF ARRESTED BURGLARS WHO OPERATED
IN NORTH ASYLUM HILL

Area of Residence	1971- 1973**	1974- 1975**	1975- 1976**	1976- 1977**
Asylum Hill				
North Asylum Hill	*	60%	46%	9%
South Asylum Hill	*	0	0	5
Total Asylum Hill	12	60	46	14
North End				
Albany Ave./Banana	33	13	17	12
Clay Hill/South Arsenal	*	7	16	14
Other North End	*	13	7	19
Total North End	78	33	40	45
Other Areas				
West adjacent	*	0	0	3
Northwest non-adjacent	*	0	2	19
Other Hartford	*	7	7	14
Outside Hartford	*	0	5	5
Total other area	10	7	14	41
TOTAL	100%	100%	100%	100%
(N)	(42)	(30)	(57)	(58)

*Data not available in these categories for time period.

**1971-1973 data are for calendar years; other data are for fiscal years beginning July 1.

Table 6.8

RESIDENCE OF ARRESTED STREET ROBBERS
WHO OPERATED IN NORTH ASYLUM HILL

<u>Area of Residence</u>	<u>1971- 1973**</u>	<u>1974- 1975**</u>	<u>1975- 1976**</u>	<u>1976- 1977**</u>
Asylum Hill				
North Asylum Hill	*	(1)***	24%	15%
South Asylum Hill	*	(0)	6	3
Total Asylum Hill	16%	(1)	30	18
North End				
Albany Ave./Banana	27	(0)	8	33
Clay Hill/South Arsenal	* } 22	(1)	0	15
Other North End	* }	(0)	22	13
Total North End	49	(1)	30	61
Other Area				
West adjacent	*	(0)	0	5
Northwest non-adjacent	*	(1)	8	5
Other Hartford	*	(2)	21	9
Outside Hartford	*	(0)	11	2
Total other area	<u>35</u>	<u>(3)</u>	<u>40</u>	<u>21</u>
TOTAL	100%	100%	100%	100%
(N)	(37)	(5)	(37)	(40)

*Data not available in these categories for time period.

**1971-1973 data are for calendar years; other data are for fiscal year beginning July 1.

***N is too small for percentages to be reliable; figures in parentheses are actual n's.

The patterns of residence of street robbers who had committed offenses in North Asylum Hill are not very reliable due to the small numbers. The rates of resident offenders do not seem to have changed significantly over time.* (Table 6.8)

It is difficult not to conclude that there was some movement of offenders during the period 1975-1977. It seems likely, and informed observers concur, that some of the offenders previously living in the Bellevue Square and Clay Hill/South Arsenal area actually moved to North Asylum Hill in 1975. It also is likely that the neighborhood police team was particularly effective in apprehending resident offenders, which would produce figures which exaggerate the extent to which this particular pattern occurred.

It appears that the number of resident offenders had decreased in North Asylum Hill by 1977, either because they were apprehended or for other reasons. It also appears clear that there was some movement of offenders, either from North Asylum Hill or from Clay Hill/South Arsenal directly into the northwest section of Hartford.

Moving the High School

This latter trend is particularly important because of another event that may have affected offender behavior. In the summer of 1976, a high school was moved from the area directly north of North Asylum Hill into the northwest corner of Hartford. This was not the high school which generated pedestrian traffic by teenagers through Asylum Hill. The school population served by the schools in Asylum Hill was unaffected by this change. However, it did bring teenagers from an area adjacent to Asylum Hill into a neighborhood in which they never before had a reason to be.

*NOTE: These figures deal only with adults. Figures are not available for juvenile offenders, a particularly serious omission for street crime.

The northwest corner of Hartford is a working class area consisting largely of single family homes. In 1976-1977, this area experienced a marked increase in the rate of burglary.

The facts outlined above suggest two possible contributing factors to this increase. First, there may have been some movement of potential offenders into this northwest corner of the city and nearby areas. Second, high school students from an area that produced a disproportionate number of offenders were now passing through an area through which they had not gone before. The latter phenomenon may have been exacerbated by a school policy of routinely releasing students who were causing trouble from school and turning them out on the streets.

The basic question for this evaluation is whether or not the reduction in burglary in North Asylum Hill could be due either to a reduction in the number of offenders residing nearby or to the fact that nearby offenders had gained better access to an attractive new area in which to commit burglaries. It is impossible to rule out completely the possibility that these factors played some role in the reduction of crime in North Asylum Hill. However, there are three facts which make it unlikely that they were important factors. First, the northwest part of Hartford was still well within a mile and a half of Asylum Hill. If the same offenders who were working Asylum Hill and were familiar with the area moved there, one still needs an explanation for why North Asylum Hill suddenly became less attractive. The crime reduction program is the most likely hypothetical reason that North Asylum Hill did become less attractive. Second, offender movement was going on over a two-year period. The only significant change that occurred at the time the program was implemented was the movement of the high school. The high school students were not thought to be a major cause of burglary; their crimes tended

to be robbery and pursesnatch. Therefore, the movement of the high school teenagers does not seem to be a particularly good explanation for the drop in burglary rate. Finally, and most important, if changes in the offender population and its behavior affected crime in North Asylum Hill, one would have expected the effects to have been even more evident in South Asylum Hill. South Asylum Hill is further away from the concentration of offenders than North Asylum Hill. Yet, South Asylum Hill experienced an increase in burglary rate while North Asylum Hill, the experimental area, showed a marked decline in burglary.

Conclusion

We have spent a considerable amount of time on alternative hypotheses in this chapter. Inevitably, there were events that could have affected the program outcomes. With only one experimental area, anyone looking critically at the results would look for alternative explanations for the observed results. However, it is important to remember that the marked reductions in burglary and in fear of crime were exactly the results that the program was designed to achieve. It would be quite a coincidence for "something else" to have happened that would have created just the results the program was designed to achieve. Given the implausibility of such a coincidence the burden of proof lies on those who would advance an alternative hypothesis; and the data supporting the alternative would have to be as consistent and as convincing as those indicating that it was the program that produced the intended effects. Although the significance of the alternatives discussed above could not be completely ruled out, it is the authors' conclusion that it was the crime control program that was primarily or solely responsible for the observed reductions in crime and fear, and that this conclusion is

considerably more plausible and consistent with the data than any of the alternatives.

CHAPTER VII

CONCLUSION

There are four criteria by which to evaluate the value of the approach to crime prevention which was tested in Hartford:

- 1) Effectiveness in reducing crime and fear;
- 2) Applicability to other settings;
- 3) Feasibility of implementation;
- 4) Net value or overall return on investment.

Effectiveness

The preceding two chapters have addressed the extent to which the program elements in Asylum Hill had the effects they were designed to achieve. On the basis of the quite extensive data available, the evidence appears convincing that during the first year the program was fully implemented, the rate of burglary and the residents' perceptions of burglary as a problem were reduced. Moreover, the increased use of the neighborhood, the improved sense of stranger recognition and some of the other indicators of informal social control augur well for the future.

Based on a one-year experience, it is obviously not appropriate to reach conclusions about the longer-term effects. However, the experience reported here is at the very least promising.

Applicability

There were three potentially exportable aspects of the Hartford project. The theory about crime control, the approach to problem analysis and the particular program that was implemented.

The theory is that informal social controls are the key to crime control. The way to intervene, if intervention is needed, is to find ways to enhance the ability or willingness of people to control their environment. This theory is applicable to all neighborhoods.

The approach used in Hartford was to address a specific set of questions about a would-be-target neighborhood, probably using specialists to help answer some of those questions.

1) Is there enough stranger-to-stranger crime, primarily burglary and street robbery/pursesnatch, so that some effort to produce a community crime prevention program is in order?

2) If so, are there ways in which the physical environment or design or the way it is used works to undermine informal social controls and therefore to create criminal opportunities?

3) Are there ways in which the police could be organized or restructured to make them more supportive and helpful to residents in solving neighborhood problems?

4) Are there ways in which residents' efforts to control the neighborhood and solve neighborhood problems could be directly encouraged or facilitated?

The answers to these questions constitute a problem definition and, when elaborated, form the foundation for a program - a set of proposed solutions tailored to the particular target setting. The particular program designed for Asylum Hill does not apply to every neighborhood. The appropriate program depends on a detailed analysis of factors affecting informal social controls and possible interventions. The Hartford approach to program development is a custom or tailor-made approach.

We can make some statements about the conditions under which the three specific program components tested in Hartford might be applicable.

A program designed to restrict vehicular traffic would appear most appropriate when the following conditions are present:

1) The offenders are primarily outsiders. (This may not be a necessary condition in order for this program to be effective, however, in Asylum Hill, it was a prominent feature of the crime problem.)

2) The resident population does not have a great deal of natural cohesiveness.

3) The use of the neighborhood by outsiders has a significant detrimental affect on the residential character of the neighborhood and the ability of residents to control what goes on in the neighborhood.

4) The neighborhood area has reasonably clear boundaries.

A police team, with decentralized command and a strong advisory committee, would be most valuable:

1) Where there is a highly centralized police force with minimal mechanisms for responding to individual neighborhood concerns.

2) When the nature of the problems in one area are significantly different from those in other parts of the city (i.e., cities with heterogeneous neighborhoods may benefit more from decentralized policing than relatively more homogeneous suburban communities).

3) When there are problems that residents see in the neighborhood that are amenable to police action. Loitering and visible vice problems are good examples of situations where police action may be useful. Police are better able to address such problems than residents. Moreover, police performance is likely to be judged on the basis of how they handle visible

problems.

A community organization effort will be most needed when there are relatively few existing groups, when groups lack directions, or when a large number of groups lack coordination or the ability to work together.

In conclusion, the most important point is that the Hartford approach to analysis and program design should apply to any neighborhood crime problem. However, the Hartford program components are only appropriate when they fit the problem analysis of a particular target neighborhood.

Implementation

Of course, some of the problems of implementation depend upon the specific characteristics of the proposed program. However, the Hartford experience provides clear evidence that an integrated, complex crime program can be implemented.

There were some features of the Hartford situation that may have made implementation more difficult than in some other settings:

- 1) The impetus and coordination of this project did not come from within the political structure of the city, nor did it initially come from the resident organizations. Therefore, the analysis of the problem and the approaches to the solutions of those problems had to be "sold" to both city officials and to residents.

- 2) There was no ready source of funding for the physical design changes. Although Hartford was initially selected because of the perceived potential to enlist private and public resources in neighborhood improvement, such funding was not available at the time the problem analysis was completed. Therefore, in Hartford, as will often be the case elsewhere, development of funding of the program was an important component of the im-

plementation.

3) The Hartford Police Department was highly centralized. Developing a neighborhood-oriented police presence therefore required more change than if the department had had effective district units.

4) Asylum Hill was a heterogeneous neighborhood, with only one existing formal organization. Overall, the population was primarily composed of renters who were highly transient. This meant that organizing the community and developing mechanisms for effective citizen participation in neighborhood problem solving was probably more difficult in Asylum Hill than in many other neighborhoods.

On the other hand, Hartford did enjoy some distinctive advantages:

1) A new police chief was appointed in Hartford in 1974. The timing of his appointment was ideal in that it corresponded with the period when possible implementation of the proposed changes was being discussed. This timing plus the particular characteristics of the chief were felicitous for setting up an experimental police team in the context of a traditional, highly centralized police department.

2) Hartford's size and the kind of city government it enjoyed may have been more favorable than others for acting on a complex proposal such as this. Certainly, decisions were not made without a great deal of debate, both public and private. However, the city manager-city council form of government may provide a more streamlined decision-making process than some other governing forms.

3) The interest and willingness of the city to invest in the Asylum Hill neighborhood was enhanced by its proximity to several large insurance companies. Those insurance companies had expressed a concern about the way

things were evolving in Asylum Hill. Although there was no direct discussion of future investments in Hartford by the insurance companies, it appeared to be generally perceived that the insurance companies would view with particular favor the improvement of Asylum Hill.

4) The existence of the Hartford Institute of Criminal and Social Justice was a unique advantage for the implementation of this project. As an independent organization in the city of Hartford, which had good working relationships with both business and governmental groups, the Hartford Institute was able to negotiate among the variety of groups that had to participate in making a complex program such as this possible.

One of the most important roles played by the Hartford Institute was continuing to goad the political process when it threatened to bog down, refusing to let the issue of the program be buried.

It seems, on balance, that the Hartford experiment provided a realistic demonstration that implementation is possible.

It is also important to note that the program itself was comparatively simple.

1) The physical design changes took place only in public places and involved no private changes. The cost of the changes was about \$150,000 for design and materials.* The 11 street changes were implemented in a period of six months, and probably could have been implemented in half that time had not considerable time been lost in trying to use unskilled CETA workers for construction.

2) The police component of the program, too, was relatively simple. The primary goals were to give police officers detailed knowledge of the

*City workers and CETA employees provided the labor, the cost of which is not included in this figure.

area, strengthen relationships between residents and police and provide residents with an opportunity to affect police priorities. Some of the features of team policing models were not needed to achieve these goals. In particular, participatory management, which involves expenditure for overtime in team meetings, was not considered to be an essential part of the program. Although it was desirable to have the team control as much of the police service in the area as possible, a full-service team also was not part of this particular program. The priority features were three: a geographically stable set of men; an identifiable leader who had some authority to set priorities and define tactics; and a strong police advisory committee composed of residents. Many decentralized police forces already have some of the components of such a program in place.

3) The community organization component of the program consisted primarily of helping to establish groups in areas where no formal organizations existed, helping the groups focus on crime, and of setting up some mechanisms for on-going participation of residents in relating to the police.

A program such as this does not require a great deal of on-going staff support. A basic assumption of the approach to formal organizations was that they would decide what they were going to do; that different kinds of groups would choose different priorities. Once the groups were in place, the responsibility for this component of the program lay with the residents.

One of the outstanding features of the Hartford experiment is that it was implemented, albeit with compromises, in a way which achieved the majority of the goals and objectives outlined in the planned program. Often, programs as implemented bear little resemblance to the original plan.

Planners in other cities will necessarily have to consider the local

situation in assessing their possible problems of implementation. However, the Hartford experiment demonstrates that a comparatively simple program can emerge from its approach to crime control. It also provides good documentation that a multi-faceted program can be implemented in a complex social and political environment.

Net Value

The cost of a program such as this will depend on the nature of the proposed program. It will also depend on the in-kind resources that might be available.

In Hartford, \$150,000 was spent on design of the street changes and materials. A grant from LEAA for team policing, part of which was used for Asylum Hill, added some funds. CETA workers were used to help with construction (where they were not very helpful) and to provide technical assistance to community groups (where they were quite helpful). In addition, of course, the problem analysis and program planning were funded by the NILECJ grants that also funded this evaluation.

It is very difficult to figure a fair allocation of the NILECJ grant, because the effort was so much more comprehensive than would have been appropriate if research and knowledge development had not been the primary goals of the grant itself. Probably the fairest statement to make is that implementation itself, not counting planning, cost between \$200,000 and \$250,000 - less than \$100 per housing unit. In addition, the Hartford Department of Public Works did most of the construction of street changes which will be borne by the city over the years.

The returns - potential and realized - from this investment depend heavily on whether the impact is long- or short-term.

In one year, the concrete savings identified were the burglaries that did not occur. From the victimization figures, we estimated that there were perhaps 300 fewer burglaries in 1976-1977 than would have occurred without the program. There also were some savings in time to police in investigations they did not have to conduct.

Such benefits are not trivial. However, the returns on the program grow considerably to the extent that crime remains lower over time. In addition to the savings to unvictimized residents and to the criminal justice agencies, an extended period of reduced crime would reasonably be expected to markedly improve the attractiveness of the neighborhood. It is impossible to put a monetary value on the reduction of fear in residents and on the attendant improvement in quality of life. However, there are concrete benefits such as reduced insurance premiums, improved willingness of landlords to invest in and maintain rental housing, increased property values and increased tax revenues to the city, that are all reasonable results of a successful crime control effort.

The calculation of the return on this kind of program can only be done on a site-specific basis. As noted, programs can be designed that are less expensive or more expensive than the one in Hartford. Moreover, a key part of the cost is the extent to which in-kind resources are available and can be utilized. On the other side, it is impossible to place a monetary value on critical factors such as fear.

However, as the facts are reviewed, there is a conclusion that seems to emerge about the Hartford experiment. If the result of the \$200,000 program, plus additional funds for planning, was only to eliminate some burglaries in 1976-1977, the cost undoubtedly was not worth it. On the other

hand, if the character of the neighborhood was fundamentally changed, so that the burglary rate stays lower than the city average, so that people feel safer than average on the streets and use their neighborhood more, so that North Asylum Hill becomes a desirable place to live again, it is almost certain that most observers would agree that the program was a bargain. It is likely that a similar conclusion would be true for other potential target neighborhoods.

This analysis, based as it is on less than a year's experience with the full program, cannot produce a definite conclusion about the relative value of this program. That must await a longer-term assessment. However, at this point, based on the evidence that is available, it does appear that the approach to crime control that was tested in the North Asylum Hill area of Hartford is one of the most promising in community crime prevention on the horizon today.

NOTES

Chapter 1 -- Introduction

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2. Ibid.
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7. U.S. President's National Advisory Commission on Criminal Justice Standards and Goals, Community Crime Prevention, Washington, D.C.: USGPO, 1973.
8. See Jane Jacobs, The Death and Life of Great American Cities, New York: Random House, 1961; Reppetto, op. cit.
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11. Oscar Newman, Defensible Space: Crime Prevention Through Urban Design. New York: MacMillan Publishing Company.
12. Reppetto, op. cit.
13. For a detailed discussion of the CPTED approach see: James M. Tien, Thomas A. Reppetto, and L.F. Hines, The Elements of CPTED. Arlington, Va.: Westinghouse Electric Corporation, 1975.

Chapter II -- Analysis of the Origins of Crime and Fear

1. See Fowler, F.J., Jr. "Citizen Attitudes Toward Local Government, Services and Taxes" (Cambridge, Massachusetts: Ballinger, 1974), Ch. 8. The ratings of police used in the Hartford study had been used in 1970 in the study of 10 U.S. cities reported in this volume.

Chapter V -- Evaluation of Program Impacts, 1975-1977

1. A. Tuchfarber and W. Klecka, Random Digit Dialing: Lowering the Cost of Victimization Surveys, Washington: The Police Foundation, 1976
2. See, for example, Fowler, 1974, op. cit.

APPENDIX A.

PROCEDURES AND METHODS

Data were collected in numerous ways for this project. In the sections that follow, the procedures used for data collection are described. These include:

- . Resident Surveys
- . Community Monitoring
- . Community Leader Interviews
- . Vehicular Traffic Data
- . Pedestrian Traffic Counts
- . Police Record Data
- . Police Attitude Questionnaire
- . Police Monitoring

The Resident Survey

Four different surveys of residents were done. In the fall of 1973, a survey of approximately 900 households throughout Hartford provided basic data for problem analysis and planning. These data were updated twice: in the spring of 1975 with a survey of about 600 households throughout Hartford (to provide data for the time of implementation), and in the spring of 1976 with a survey of about 200 households in Asylum Hill (to provide data for the time of implementation of the physical changes). The evaluation survey was carried out in the spring of 1977 with a sample of approximately 900 households throughout Hartford.

Sample Procedures

The procedures for each survey were essentially identical each year - the samples, questionnaires, field procedures and coding procedures - in order to insure comparability across time. The one exception was that the 1976 sample was not independent of the 1975 sample, an issue which will be discussed below.

Sampling

The basic design was to do a citywide survey, with oversamples in key areas to permit more detailed analysis. To this end, Hartford was divided into four parts or strata: Asylum Hill, Clay Hill/SAND, the area adjacent to Asylum Hill and the remainder of Hartford.

The 1973 sample started with City Directory listings. The City Directory may have two sources of error, omitting an address or omitting units at a particular address. To make certain that every address had a chance of falling into the sample, two supplementary procedures were completed, a

sample of new construction was drawn and a block supplement procedure was conducted.

A list of all new construction for the city of Hartford from January 1970 to June 1973 was obtained. The list was compared with the City Directory. All new construction not listed in the City Directory was divided into areas and the overall sampling rate for each was applied.

The block supplement consisted of sampling census blocks at the same rate at which housing units were selected and checking to see if all the addresses on the selected blocks were listed in the City Directory or in the stratum of new construction. All addresses found but not accounted for in one of those other two sources automatically became part of the sample.

In order to correct for omitted units at a particular address, all units for each selected address in Clay Hill/South Arsenal and Asylum Hill, plus a sizeable proportion of Adjacent and Remainder, were independently listed. Additional ("found") units were added to the sample at the same rate as the units at that particular address had fallen into the sample.

For the parts of the Adjacent and Remainder areas which were not field listed, the total number of units expected from the City Directory were compared with the total units reported to be at that address* for those addresses where ten or fewer units were expected.** If there was a discrepancy, an interviewer was sent to the address to do field listing.

In 1975, a new independent sample of households was selected, this time using a clustered area probability sample approach. The reason for the

*For phone interviews, respondents were asked the number of units at their address. For personal interviews, it was done by observation.

**The rate at which additional units would have to be found in order to be added to the sample where there are more than 10 units practically eliminates their chances of becoming part of the sample.

changes was that we were not realizing much cost savings by using the City Directory. Almost all structures in Hartford are multi-unit, meaning almost complete listing.

Blocks were selected proportionate to 1970 housing unit estimates, selected blocks were listed, and the specific housing units were selected. An advantage of the approach was that housing units selected from blocks were distributed around the blocks, minimizing the homogeneity of clusters and thereby improving the efficiency of the design. Except for the possible improvement in the power of the design, the samples were comparable in 1973 and 1975.

The 1976 survey was conducted only in Asylum Hill because of limited available funds. The addresses in the Asylum Hill sample in the 1975 survey were re-contacted in 1976. Eligibility was determined again, and respondent selection was redone. Thus, some households ineligible in 1975 were interviewed in 1976; and vice versa. Some respondents were the same, some different when interviews were conducted in the same household.

This survey was a compromise. The implementation was delayed a year longer than expected. We felt it essential to up-date the survey data to the spring of 1976. There was no budget for it. By using the same sample, considerable sampling costs were saved.

There are limits to the use of these data. There are no comparable citywide data in 1976. The estimates are not independent of the 1975 survey estimates. On the other hand, the sample is unbiased. Based on panel analysis in the research literature, the effect of re-interview a year apart on data should be trivial.

Because the samples were not independent, we compare 1975 with 1977 data and make 1976-1977 comparisons. However, we do not make 1975-1976

comparisons per se.

In 1977, a new sample was selected, again a clustered area probability sample, with clusters well dispersed around blocks. This sample differed from those of previous years in two ways. The Asylum Hill area was divided into areas north and south of Asylum Avenue (North Asylum Hill and South Asylum Hill, respectively), and these two areas were sampled at different rates. In addition to the household-based sample, Asylum Hill residents who were members of the community organizations directly associated with the program (SSCA, WHO and CAHA) were sampled from lists. Membership lists were obtained from each of these organizations, containing a total of 260 names. A total of 50 interviews were desired. A sampling rate was determined based upon a 75 percent response rate, as well as the expected eligibility rates.

Checks were made for duplication of members' addresses in the area sample. Essentially, those on membership lists had a higher probability of selection than other residents. By weighting to adjust for the probability of selection, these interviews can be included in the Asylum Hill sample with interviews based on household selection. This feature of the sample was introduced to increase our ability to describe "active" residents.

Instrument Design

For the 1973 resident survey, two interview schedules, one a subset of the other, were constructed by the evaluation team working closely with the other study principals. The interviews were developed around the following general topics: perceptions of neighborhood and degree of neighborhood cohesiveness, use of the neighborhood, protection of home, perception of the police, fear and the perception of crime, perception of danger zones in the respondent's neighborhood, victimization, the media and general demographic information.

The short form was used in the control areas and for a random half of the samples in the two target areas. The other half of the respondents in the target areas were interviewed using the large questionnaire.

The decision as to which questions would be asked in both forms and which would only be asked in the long form was based on the intended use of the questions. If the purpose of the question was evaluation of the theoretical model being tested, it was included in both forms. If, on the other hand, the purpose of the question was primarily to aid in the design of the crime control plan to be implemented, it was asked only in the long form which was to be used only in the target areas. Measures of each of the general topics were included in the short form.

In 1975, only one interview schedule was used. It was a subset of the 1973 long form covering the same general topical areas of neighborhood attitudes, perceptions of police, fear, victimization and demographic data. It included some items that had not been asked in the 1973 short form.

This same interview schedule was used for the 1976 Asylum Hill resident surveys, with the addition of questions dealing with awareness of and attitudes toward neighborhood street changes and organizational changes for the police.

The 1977 interview schedule included all items asked in 1976, with some additions to deal with the citizen evaluation of the experimental program. The questions which were added to the schedule were designed to assess the respondents' awareness and degree of involvement with community organizations and their perceptions concerning both neighborhood street changes and changes within the police department.

Schedules for all four surveys were pre-tested before going into the field. In general, they averaged less than 45 minutes in length, with the

exception of the hour-long form used in 1973.

Interviewing Procedures

For all four surveys, two methods of data collection were used - telephone and field interviewing. In 1973, telephone interviewing was used only for the short interview schedule. If an interview could not be taken on the phone, the interview was then conducted in the field. About 60 percent of the short interviews were conducted on the phone, the remaining short interviews and all of the 200 longer (target area) interviews were taken in person. For the other three years, interviews were conducted on the phone when telephone numbers were obtainable; otherwise, they were assigned to the field.

The telephone interviewing was done from Boston by the Center for Survey Research's permanent professional staff of interviewers. A field interviewing staff was hired and trained in Hartford for each of the four surveys.

New interviewers received about a week of training including how to ask questions using the exact wording appearing in the questionnaire, the use of non-directive probes, and verbatim recording of open responses.

Advance letters were sent to selected households. Households were then contacted, either by telephone or personal visit. In situations where the respondent could not be contacted on the first field call at a sample household, interviewers were required to call back at the household at least six times in order to obtain the interview; more calls were required (if necessary) for addresses assigned to the telephone. These call-backs were to be made at different times of day and on different days of the week to maximize the chance of a contact. Addresses at which the designated individuals refused to be interviewed were generally reassigned to a second,

interviewer who contacted the individuals and attempted to persuade them to be interviewed.

As noted above, there was a residence eligibility requirement. An adult had to have lived at selected addresses for 6 months or more in order to be eligible for the full interview. This insured a minimum level of experience in the neighborhood, and a basis for reporting household crimes.

A screening interview was conducted with any responsible adult.

In occupied households where one person had resided for six months, some information was obtained in order to be able to describe "ineligible" households. In eligible households, an objective selection of adults (persons 18 or older) was used to designate a respondent. The procedure (Kish Selection Tables) permits no interviewer discretion.

Of course, no substitutions for sample households or selected eligible respondents were allowed.

Sample and Field Results

Tables A1 through A4 show the results of the data collection efforts. Addresses which fell into the original sample were classified as non-sample when either the address was not an occupied housing unit or no occupant had lived at that address for six months. Reasons for non-interviews were refusals or inability to contact occupants after a reasonable number of calls distributed over day time and evenings, weekdays and weekends.

Response rates varied somewhat among the four sample areas in each of the four surveys. Average response rates for the city as a whole were 77 percent in 1973, 74 percent in 1975, 65 percent in 1976* and 76 percent in 1977.

*Sample in Asylum Hill only.

Table A1

SAMPLE AND FIELD RESULTS: 1973

	<u>Asylum Hill</u>	<u>Clay Hill/ South Arsenal</u>	<u>Adja- cent</u>	<u>Remain- der</u>	<u>Total City</u>
Original Sample	436	388	392	477	1693
Additional Housing Units Found	2	9	17	15	43
Total Sample	438	397	409	492	1736
Non-Sample*	185	138	122	135	580
Total Eligible Sample	253	259	287	357	1156
Non-Interviews**	68	53	73	71	265
Interviews Taken	185	206	214	286	891
Response Rate	73%	80%	75%	80%	77%

*Includes sample addresses which were not dwellings and sample households at which no eligible respondent was found.

**Includes sample households where no contact was made after a reasonable number of calls, and those where the selected respondent could not or would not be interviewed.

Table A2

SAMPLE AND FIELD RESULTS: 1975

	<u>Asylum Hill</u>	<u>Clay Hill/ South Arsenal</u>	<u>Adja- cent</u>	<u>Remain- der</u>	<u>Total City</u>
Original Sample	335	185	208	232	960
Additional Housing Units Found	4	17	5	1	27
Total Sample	339	202	213	233	987
Non-Sample*	98	60	44	33	235
NER (no eligible R)	60	22	30	19	131
NER as % of occupied HUs	20%	13%	14%	39%	15%
Total Eligible Sample	241	142	169	220	752
Non-Interviews**	64	43	37	44	188
Interviews Taken	176	99	129	154	556
Response Rate	73%	70%	76%	76%	74%

*Includes sample addresses which were not dwellings and sample households at which no eligible respondent was found.

**Includes sample households where no contact was made after a reasonable number of calls, and those where the selected respondent could not or would not be interviewed.

Table A3

SAMPLE AND FIELD RESULTS: 1976

	North <u>Asylum Hill</u>	South <u>Asylum Hill</u>	Total <u>Asylum Hill</u>
Original Sample	193	145	338
Additional Housing Units Found	0	0	0
Total Sample	193	145	338
Non-Sample*	82	32	114
NER (no eligible R)	34	16	50
NER as % of occupied HUs	23%	12%	18%
Total Eligible Sample	111	113	224
Non-Interviews**	30	48	78
Interviews Taken	79	67	146
Response Rate	71%	59%	65%

*Includes sample addresses which were not dwellings and sample households at which no eligible respondent was found.

**Includes sample households where no contact was made after a reasonable number of calls, and those where the selected respondent could not or would not be interviewed.

TABLE A4

SAMPLE AND FIELD RESULTS: 1977

	<u>North Asylum Hill</u>	<u>South Asylum Hill</u>	<u>Total Asylum Hill</u>	<u>Asylum Hill Membership</u>	<u>Clay Hill/ South Arsenal</u>	<u>Adja- cent</u>	<u>Remain- der</u>	<u>Total City</u>
Original Sample	421	218	639	82	176	314	347	1558
Additional Housing Units Found	1	0	1	0	6	16	0	23
Total Sample	422	218	640	82	182	330	347	1581
Non-Sample*	164	57	221	16	58	65	50	410
NER (no eligible R)	57	27	84	15	11	26	28	164
NER as % of occupied HUs	18%	14%	17%	18%	8%	9%	9%	12%
Total Eligible Sample	258	161	419	66	124	265	297	1171
Non-Interviews**	65	56	121	14	21	62	68	286
Interviews Taken	193	105	298	52	103	203	229	885
Response Rate	75%	65%	71%	79%	83%	77%	77%	76%

*Includes sample addresses which were not dwellings and sample households at which no eligible respondent was found.

**Includes sample households where no contact was made after a reasonable number of calls, and those where the selected respondent could not or would not be interviewed.

Reliability of the Data

Sample surveys, even though properly conducted, are liable to several kinds of errors. These include response errors, which arise in the reporting, recording and processing of the data; non-response errors, which arise from failure to interview all individuals selected in the sample; and sampling errors, which arise from the fact that, by chance, any sample may differ from the population from which it was drawn. Some evaluation of each of these types of error is necessary for the proper interpretation of any estimate from survey data.

Response errors. Such errors include inaccuracies in asking and answering questions in the interview, recording responses, coding the recorded responses, and processing the coded data. They can be reduced by thoroughly pretesting field procedures and instruments, training interviewers and coders, and exercising quality controls throughout the data collection, coding, and editing phases of the research process.

The questionnaire and field procedures used in the resident survey were pretested before each survey. Since the later instruments largely replicated earlier ones, the most extensive pretesting was carried out in the earlier years.

New interviewers were trained for about five days prior to their first assignment. Extensive role playing in standardized, non-directive techniques was included. Their training also included a question-by-question review of the survey instrument. They took practice interviews and discussed them with a supervisor. Supervisors reviewed their work throughout the field period. These procedures were followed for each of the four surveys.

In 1973, responses were coded onto coding forms and keypunched from these forms. Responses to the later surveys were coded directly on the inter-

view schedules and keypunched from the schedules. Before starting on this task, the coders were taught both the codes and the coding conventions. Coding was checked by coding 10 percent of the interviews twice (by two different coders) and comparing the two codings for discrepancies. Because of the importance of the crime data and the various complications which occur in classifying crimes, all of the information pertaining to victimization was independently check-coded. Key punching was key verified 100 percent.

Data tapes made from the keypunched data cards were checked for inconsistencies and incorrect codes and errors found were corrected.

It is impossible to eliminate response errors from data. Moreover, we know there is reporting error, yet cannot estimate its magnitude in most cases. However, the quality controls used should keep such errors at a level or below the level found in the best examples of household surveys. Moreover, because procedures were consistent across surveys, some types of errors - such as memory bias in reporting - should be constant and not affect comparisons across time.

Non-response errors. Some proportion of the sample in any survey fails to respond, usually because of refusals or the failure of the interviewers to contact potential respondents in spite of repeated attempts. To the extent that non-respondents are concentrated in some population subgroup (such as single persons living alone), this subgroup (and their perceptions or experiences) may be underrepresented in the sample responses.

In addition, because of the six-month residency requirement, there is the possibility that the proportions of certain groups eligible could vary from year to year. Although this is not a problem of non-response, it is a factor which could affect comparisons from year to year. It also means that in any given year those interviewed could differ from the pop-

ulation as a whole.

Tables A1-A4 showed response rates and rates at which sample addresses failed to produce an eligible respondent for each of the four years. There is not a good way to estimate the biases non-response may have introduced into the data. However, the responses were similar from year to year. Again, it is likely that the biases, to the extent they exist, are constant.

In 1975, 1976, and 1977, brief interviews were conducted whenever possible at households where no one was eligible and when the eligible respondent refused the full interview. These short interviews gathered data on household composition and the racial or ethnic background of household members.

Comparing those eligible with the total sample, we found the 1975 sample interviewed included fewer blacks and Hispanics and more whites in Asylum Hill and the city as a whole than the rates at which they were in the population. This is apparently the result of higher mobility within Hartford among minorities than among whites at that time. Minority households were less likely to have lived in their residence long enough to be eligible for the full interview.

By 1977, this was no longer the case; the sample population interviewed did not differ significantly from the entire sample (including non-sample and non-interviews) in racial/ethnic composition. There are a few comparisons across samples for which this difference between 1977 data and previous samples is significant.

Sampling error. The extent of the sampling error can be determined if it is known exactly how, and with what probability, the sample was selected from the total population. The size of the sampling error varies in relation (a) to the size of the sample selected and (b) the values for any given characteristic or attitude. Sampling errors can also be affected by

particular features of the sample design (such as clustering).

The exact calculation of the amount of chance variability could occur with respect to a sample depends in part on the clustering - the fact that in all the samples, three to five housing units were selected from the same block to reduce listing and travel costs. A key question is the degree of heterogeneity of those clusters compared with the population as a whole in variables measured. To the extent that clusters are homogeneous, the sample variances are larger than if an unclustered sample had been selected.

We calculated the ratio of the variances of the design used in 1977 to what an unclustered sample would have yielded for several key variables and for different areas. Table A5 shows the results of some of these calculations.

For most estimates, it can be seen that the sample designs were equivalent to simple random samples. The clustering does affect the variance of race estimates and the estimates of burglary and robbery rates in North Asylum Hill.

Based on these computations, it appears that using sampling error estimates about ten percent larger than those for simple random samples is reasonable for most comparisons. However, in the text, the actual variances for the burglary and robbery rates in North Asylum Hill were used to calculate statistical significance.

In general, sampling errors vary with the sample size and the values for the characteristic measured. Table A6 is a generalized table of sampling errors which takes both these factors into account.* Thus, when 26 percent

*The figures in the table are average estimates based on computations such as those in Table A5. For any particular variable or area, the true variances could differ from those in Table A6.

Table A5

RATIO OF VARIANCES CALCULATED ON CLUSTERED DESIGN
TO VARIANCES BASED ON SIMPLE RANDOM SAMPLE FOR
SELECTED VARIABLES BY AREAS IN HARTFORD

<u>Variable</u>	<u>North Asylum Hill</u>	<u>South Asylum Hill</u>	<u>Clay Hill</u>	<u>Rest of Hartford</u>
Percent white	1.4	0.9	1.3	1.8
Reported Ease of Stranger Recognition	0.8	0.9	1.2	1.1
Frequency Walk in Neighborhood	0.8	0.9	1.0	1.2
Perceived Likelihood Burglary	0.8	1.7	0.8	0.8
Perceived Likelihood Robbery	0.9	1.9	0.7	0.7
No Burglaries	1.7	1.6	1.0	1.1
No Robbery or Pursesnatch	1.4	1.1	0.9	1.2

Table A6

APPROXIMATE SAMPLING ERRORS OF PERCENTAGES

Chances are 95 in 100 that the central value lies within the reported value, plus or minus the number of percentage points shown in this table.

Sample Size	Sampling Errors for Reported Percentage Around			
	5 or 95%	10 or 90%	20 or 80%	50%
50	-	-	12	16
75	-	7	10	13
100	-	7	9	11
150	4	5	7	8
175	4	5	7	8
200	3	5	6	8
250	3	4	6	7
300	3	4	5	6
400	2	3	4	6
500	2	3	4	5
750	2	3	4	5

of the 220 families interviewed in North Asylum Hill in 1977 report that they think crime has gone up in their neighborhood, the sampling error (actually two standard errors) is six percentage points. This means that there are 95 chances in 100 that the true population value lies within plus or minus six points of 26 percent. That is, there are only five chances in 100 that less than 20 percent or more than 32 percent of all the families in North Asylum Hill would say crime went up if a complete census, rather than a sample, survey were done. The table shows that when there is a smaller percentage reported in the sample, the sampling error is smaller; when there is a smaller subgroup, the sampling error is larger.

There is a further consideration. It is important to know whether a difference between two values obtained in the sample is "statistically significant." That is, would the difference still exist if other samples of the population were interviewed or if the whole population were surveyed? Calculation of statistical significance again depends both on the size of the groups being compared and on the percentages obtained. Table A7 is a generalized table of average sampling errors of differences. Thus, when the 43 percent of the 71 households in the North Asylum Hill sample interviewed in 1976 who thought crime had gone up is compared with the 26 percent of the 220 households interviewed there in 1977 who said crime had gone up, there are 95 chances in 100 that the difference was not due to chance. (The table shows that a difference of about 13 percent would be significant with groups of about these sizes and with these percentages.) This means that a difference of this magnitude (43 minus 26, or 17) would arise through chance fluctuations or because this particular sample was selected considerably less than 5 times in 100.

Table A7

SAMPLING ERRORS OF DIFFERENCES

95% Probability

Differences required for significance in comparisons of percentages from two different sub-groups

Size of Sample or Group	75	100	200	350	500	750	1000	1500
For Proportions from About 30% to 70%								
75	15	14	13	12	12	11	11	11
100		13	12	11	10	10	10	10
200			10	9	8	8	7	7
350				7	7	6	6	6
500					6	6	5	5
750						5	5	4
For Proportions Around 20% or 80%								
75	13	13	11	10	10	10	10	10
100		11	10	9	9	9	9	9
200			8	7	7	7	7	6
350				6	6	6	5	5
500					5	5	5	5
750						5	4	4
For Proportions Around 10% or 90%								
75	10	10	8	8	8	8	8	7
100		9	8	7	7	7	7	7
200			6	6	6	5	5	5
350				5	5	4	4	4
500					4	4	4	3
750						3	3	3
For Proportions Around 5% or 95%								
200			5	4	4	4	4	4
350				4	3	3	3	3
500					3	3	3	3
750						3	2	2

Combining the Sub-areas: Weighting

For each of the four surveys, households were sampled from Asylum Hill and Clay Hill/South Arsenal at a higher rate than those selected for other areas of the city in order to produce sufficient cases from these two areas for separate analysis. In 1977, samples for the two sub-areas of Asylum Hill were selected at different rates, as was that for Clay Hill/South Arsenal. To allow combining the cases from different areas for a given year, weights based on the probability of selection in each area were computed and assigned on a case by case basis. Weights based on their probability of selection have also been computed and assigned to cases from the 1977 organization membership list sample so that these may be combined with the area sample cases. All of these weights may be called "area weights".

It will be recalled that once an interviewer had contacted a sample household, he or she had to determine how many adults eligible to be interviewed lived in the household; where there was more than one eligible adult, one had to be selected at random using a prespecified procedure. The probability of any individual's becoming a respondent is the product of the probability of his or her household's selection and the probability of any eligible adult's selection within that household. Hence, individual respondents are weighted by the product of the area weight and the number of eligible adults in the household (the "combined weight").

Which of these two weights is used depends on the type of variables under consideration. Where the variable represents information about households (such as household composition, total family income, or victimization experience which was asked for everyone in the household), the responses are weighted by the area weight. Where a variable represents information about individuals (such as education completed, frequency of walking in the neigh-

borhood, any perceptions or attitudes), responses are weighted by the combined weight.

Weighting can seem complicated. However, it is simply a way of accurately combining units that had different chances of selection to produce accurate aggregate estimates. All percentage distributions in this report are based on appropriately weighted data. Statistical reliability, of course, is dependent on the actual number of observations (interviews) - not on weighted numbers - and all statistical tests were so calculated.

Community Monitoring

Methods of Monitoring the Community Organizations

The Hartford Institute was responsible for monitoring the activities of the Asylum Hill community organizations from the beginning of implementation (mid-summer 1974) through the end of the evaluation year (June 1977). These organizations included Sigourney Square Civic Association (SSCA), Central Asylum Hill Association (CAHA), Western Hill Organization (WHO) and the Asylum Hill Police Advisory Committee (AH/PAC), a coalition of representatives from the three preceding groups.

In the beginning, the Institute assigned at least one staff member to attend the meetings of the individual organizations and to take minutes at those meetings. Throughout the early community meetings, in 1974 and the first four months of 1975, this responsibility was assigned to Institute core staff.

In March, 1975, using available Comprehensive Employment Training Act - Public Service Employment funding, the Institute hired three additional project staff members. Each of these three persons was given the responsibility of continuing intensive involvement with one of the three individual organizations, including the monitoring of all meetings. One monitored AH/PAC meetings as well. This arrangement continued for approximately one year, through early summer of 1976. At that time, Institute staff reached a decision to terminate this intensive relationship. They reduced their involvement in day-to-day organizational activities in order to let the organizations develop more independently.

From mid-summer 1976 through June 1977, other monitoring methods were used that were less formal and specific than before. At intervals, Institute staff prepared progress reports on activities of the community organizations.

To reconstruct past activity accurately, Institute staff made periodic personal contact with the community organizations and their leadership to gather summary data. These periodic progress reports, while obviously not as minutely detailed as the minutes of meetings, did document general developments in community organization activity during this one-year period.

A second method employed during this period was to obtain from the Asylum Hill police team commander copies of all minutes taken at AH/PAC meetings. As they regularly reported on the major crime-related concerns of the three participating organizations and the various activities each had undertaken, those minutes proved helpful as a monitoring device for the three individual organizations as well as for AH/PAC.

Methods of Gathering Other Data on the Community

Throughout the project, other sources were monitored to discover and keep track of relevant activities not part of our program that were taking place in Asylum Hill and elsewhere in Hartford. These included:

- daily monitoring of the Hartford Courant and Hartford Times (until its demise) for community developments.
- monthly monitoring of the AHI newsletter The Hill Ink.
- regular weekly meetings with the commander of the Asylum Hill police team.

In addition, Institute staff, including those not directly associated with this project, normally received relevant information as a result of professional and personal relationships developed with key actors in the public and private sectors of Hartford. Because of the diverse activities and interests of this staff, their opportunity to meet and work with persons from many different organizations and agencies, and the fact that Hartford is

in a real sense a "small town" with many of the same people responsible for generating much of the local activity, the staff was able to keep abreast informally of most relevant information concerning Asylum Hill. Whenever these sources provided data particularly germane to this project, that information was recorded as an internal memorandum to be filed for the general purpose of project monitoring.

Reliability of the Data

These data were intended to serve as the basis for a description of the community organizations' activities and of the implementation process. To be reliable for such purposes, it was necessary to record project-related events and developments in a systematic fashion throughout the program implementation and formal evaluation periods. The monitoring data on the community organizations consistently included information on certain topics related to specific program goals. These include: number of members, age and racial composition of the membership, crime-related activities (with detail on funding sources, level of participation, specifically what was done) and other activities. The amount of detail varied.

Of course the minutes of meetings provided the most detail. Data collected in summary form vary in their precision according to the length of the periods summarized (which, in turn, varied from six weeks to six months). The shorter the period, the more detailed the description of events. Because relevant topics were consistently covered in gathering summary data, the data provide a running account of events and developments significant to this project.

In general, the process seems unlikely to have omitted any very significant event; and follow-up procedures were taken to fill in gaps or details

when the evaluation team felt they were needed.

The Community Leader Interviews

Overview

Twenty-eight persons living and/or working in the Asylum Hill area, chosen by referral, were interviewed in two waves during the formal evaluation year. The purpose of these interviews was a fuller exploration of people's perceptions of neighborhood problems and strengths, and of the crime prevention program and its effects to date, than could be done in the resident survey. We also needed information of two rather specialized kinds: the nature and problems of the real estate and rental markets in the area, and the effect of the program on neighborhood businesses. The former was needed as background for our understanding of the extent and type of transiency in the area; the latter, as more systematic and specific information on local businessmen's objections to the program and its effects on their business. Overall, this set of interviews was intended as supplemental monitoring information from the point of view of people directly affected by the program.

Selection of the Respondents

The twenty-eight respondents fall into four categories:

<u>Type of Respondent</u>	<u>Number</u>
Manager of rental property	3
Small businessman	6
Officer/member of project community organization	9
Other area resident/leader	10
	28

Hartford Institute staff provided an initial list with names in each of the four categories. Respondents contacted from this list were asked, after they had been interviewed, for additional names.

There was an attempt to obtain some distribution of respondents according to characteristics that might affect their experience with the neighborhood and the program. For example, three of the businessmen interviewed were located in the northern part of the area where the street changes had been carried out; they were among the group who had objected to them. The other three, matched as to type of business, were located south of Asylum Avenue where they would not be so directly affected by the street changes; they were not among the group objecting.

Four Asylum Hill community organizations were directly associated with this project, and we had respondents from each:

	<u>Number</u>
Central Asylum Hill Association (CAHA)	2
Sigourney Square Civic Association (SSCA)	4
Western Hill Organization (WHO)	2
Police Advisory Committee (PAC)	1

The current president of each of the four organizations was interviewed. The other six were particularly active members, most of whom were (or had been) officers in their organizations. Seven respondents were white and two were black.

The 10 other leaders and residents included six associated with other neighborhood organizations or institutions: Asylum Hill, Inc., a neighborhood improvement organization; the Hill Ink, the neighborhood newsletter; the Hill Center; a neighborhood church; and one of the large insurance companies located in the area. The four remaining respondents were residents of

the northern part of the neighborhood; two of these were former members of project organizations who had dropped out. Three of this group were black and seven white.

Interviewing Methods

The interviews were conducted in two waves, the first during the first two weeks in March, 1977, and the second during the last two weeks in June, 1977.

Three semi-structured protocols were used in each wave, one for the real estate respondents, one for the businessmen, and the third for the two remaining groups. One set of questions was included in all three protocols which asked about neighborhood problems, particularly crime, about the crime prevention program generally, and about specific aspects of the program. Real estate experts were asked an additional set of questions about the rental and private property markets in the area. Neighborhood businessmen were asked about specific effects of the program on their businesses. The other two groups of respondents were asked an additional set of questions about their organization (if any) and operation of the community organizations generally. In the first wave of interviews, respondents were asked about the current situation and how things had changed since five years previously (when implementation began). In the second wave they were asked about changes that had occurred since the first wave.

Three experienced interviewers conducted the interviews. Their training for this set of interviews consisted of briefing on the program, its goals and implementation, and on objectives of each set of questions in the protocol. The first wave was conducted in person, by appointment; interviews lasted about an hour, and were taped and transcribed. The second wave was

conducted by phone; interviews lasted about a half hour and responses were written down verbatim by the interviewers.

Reliability of the Data

Because these respondents are not a representative sample of any population, no statistical inferences can be made from their responses. That is, we cannot know how widespread their opinions, perceptions and feelings are among area residents nor among specific groups such as managers of rental properties, neighborhood businessmen or organizational participants.

On the other hand, the respondents were asked the same set of questions. Therefore, we have some idea of the range of opinion and feeling on the subjects addressed, and of how the groups from which they were drawn may differ on these subjects.

These interviews were used primarily as a supplement to, and a check on, analysis of the quantitative data.

Vehicular Traffic Data

In April, 1976, just prior to implementation of the physical changes, machine counts were conducted at 15 sites; these were repeated in June, 1977, at the end of the formal evaluation year.*

Selecting the Sites for Counts

Sites were selected to provide before and after counts for streets for which the greatest change was expected. These included: streets for which treatments were planned (Sargeant, Ashley, Atwood, May, Willard, Townley and

*Counts were also carried out in 1975 as part of a study of the feasibility of the proposed changes requested by the city. The sites selected and methods used differed somewhat from the counts done for purposes of evaluating program effects. Data from the 1975 counts were not used for evaluation purposes; hence they are not discussed here.

Huntington), collector streets being left open to through traffic in North Asylum Hill (Sigourney and Collins) and the streets bordering the area (Woodland, Garden and Asylum). Figure 5 shows the 15 sites at which counts were conducted.

Methods for Gathering the Data

All vehicular traffic counts were carried out by a Hartford consulting firm with expertise in traffic analysis.

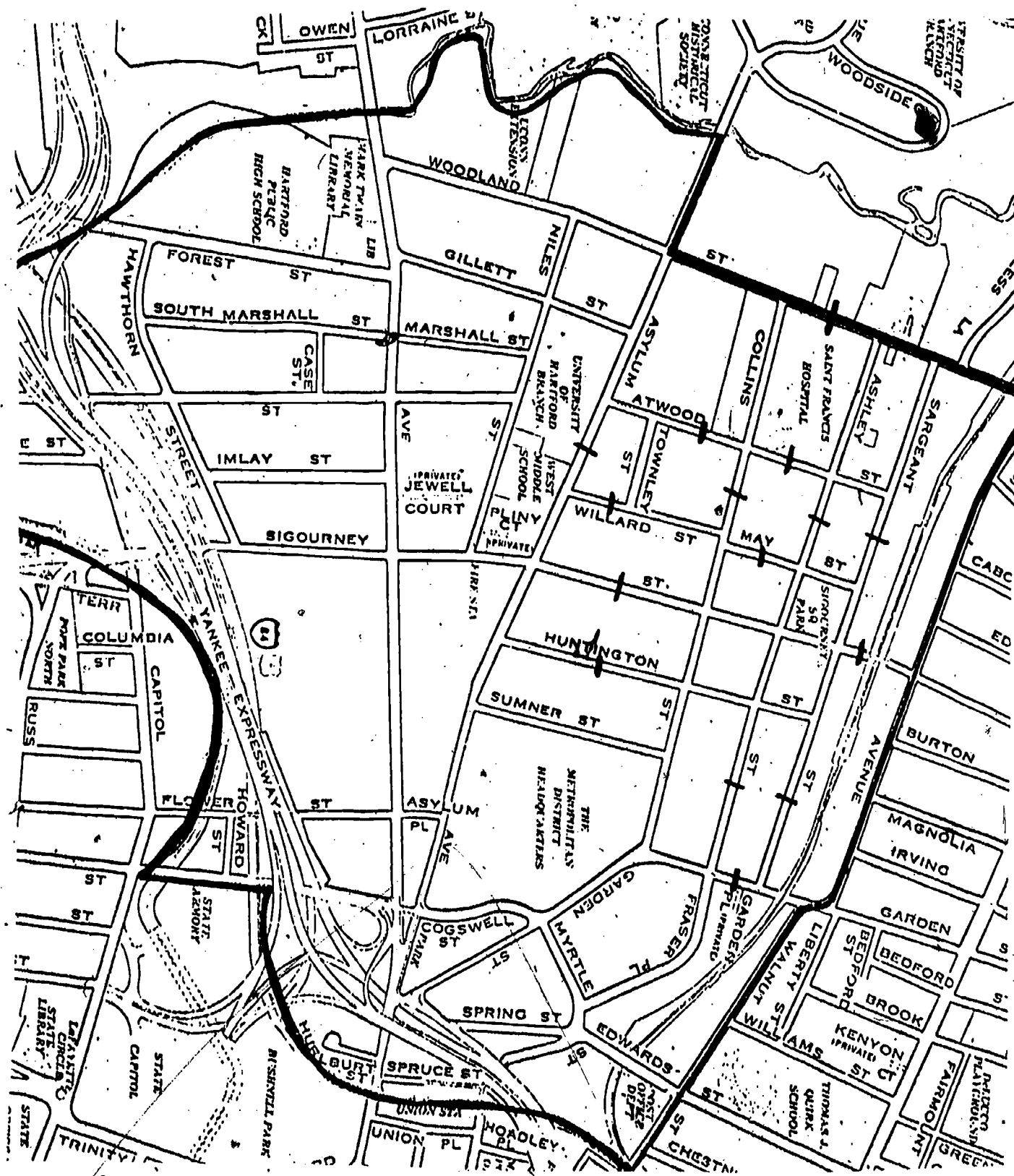
The counts each year were conducted by machine for a single 24-hour period, broken into 15-minute sequences to allow aggregation of data by time of day. Counts were taken separately for each side of the street at each site to determine the volume of traffic in each direction. The counting machines were placed in the same mid-block locations each year.

Reliability of the Data

Because the counts were performed each year at the same sites, using the same methods, the data should provide comparable estimates of the traffic volume on each block when counters were placed. These estimates may be compared across time and from site to site. The main uncertainty is the extent to which traffic rates vary from day to day in a random fashion.

Two points should be noted about further uses of the machine count data. First, there is some difficulty involved in inferring traffic flow patterns from these data, particularly since counts were not obtained for each block face in the area. Second, because of the difficulties involved in inferring flow patterns, it is also difficult to adjust sums of counts from sites along the same street, or on intersecting streets, so that ve-

Figure 5
VEHICULAR TRAFFIC COUNT SITES, 1976-1977



KEY: — MECHANICAL 24-HOUR COUNTERS (15 SITES)

hicles crossing more than one counter are counted only once.

In the tabulation presenting these data in Chapter V (Table 5.9), this consideration most clearly affects the totals obtained for "collector streets," "border streets," and overall totals; these totals probably overestimate the traffic volume to some extent. However, the degree of such overestimation is probably proportionally similar from one year to the next. The indicated changes over time should be reasonable indications of the type of change that actually occurred, though they may underestimate the degree of such changes, whether positive or negative.

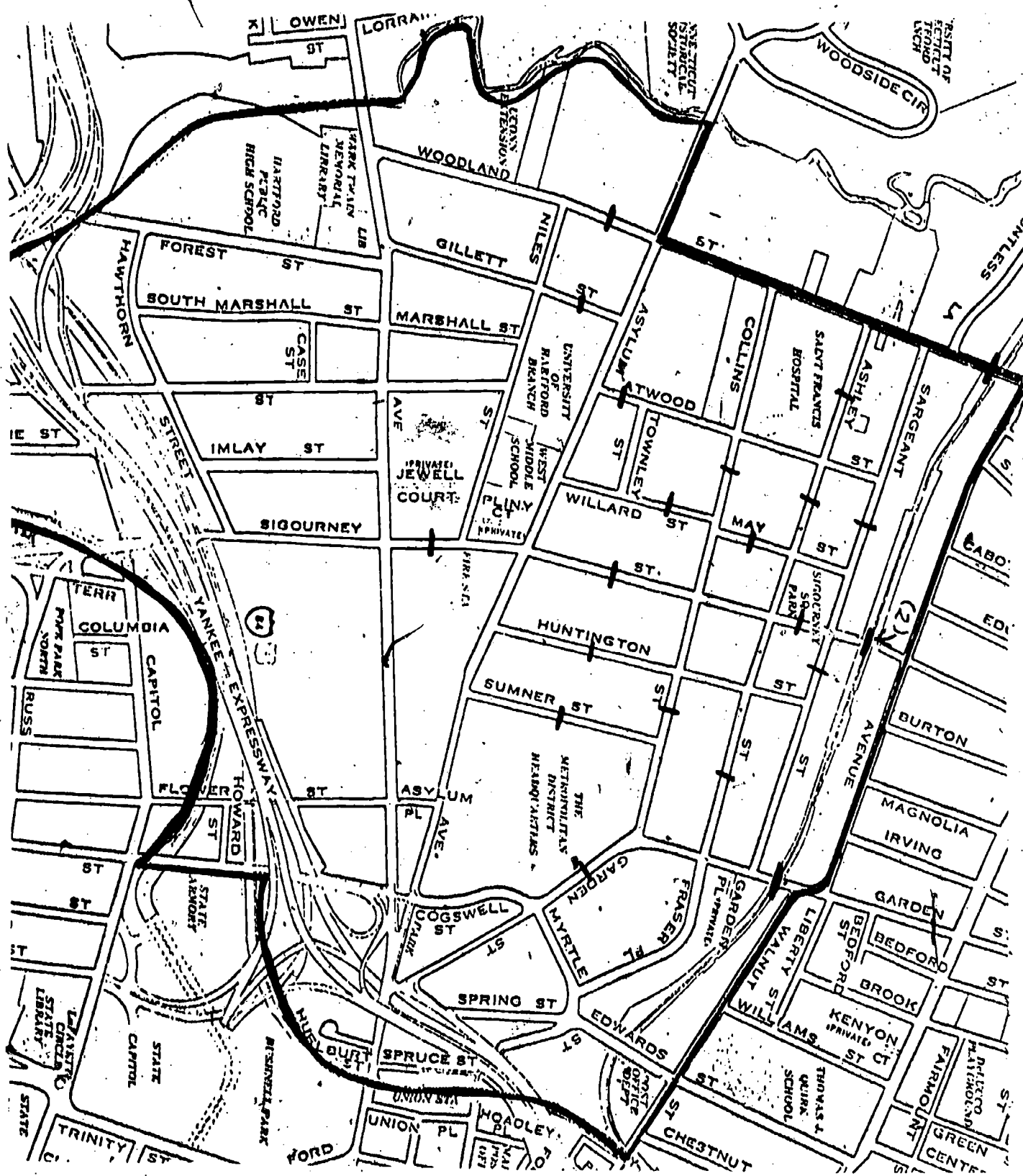
Pedestrian Traffic Counts

Manual counts of pedestrian traffic passing selected sites at selected times of a single day were performed in June, 1975 and April, 1976, (before implementation of the street treatments) and in June, 1977, (after implementation at the end of the formal evaluation year). These counts were carried out at the same sites, using the same methods, each year.

Selecting the Sites and Times for Counting

Sites were selected to provide before and after counts for streets which the planned street treatments were particularly expected to affect, as well as some that were not expected to be affected. As shown in Figure 6, sites were chosen at the main pedestrian entry points into the neighborhood (the bridges over the railroad tracks at Woodland, Sigourney and Garden Streets), on all streets for which treatments were planned (Sargeant, Ashley, Atwood, May, Willard and Huntington), on the two collector streets being left open to through vehicular traffic to which pedestrian traffic might also be re-directed (Sigourney and Collins), and other streets used as routes by pedestrians (Garden, Summer, Gillett and Woodland). In 1975, counts were performed

Figure 6
PEDESTRIAN COUNT SITES



KEY: — COUNTING STATION

at all 22 sites shown in Figure 6. In 1976 and 1977, counts were performed only at the 19 sites in North Asylum Hill. The three sites south of Asylum Avenue were eliminated in the final two waves of counts because the street treatments were expected to have no effect on those sites.

Six one-hour periods were selected so as to provide data on the range in volume and type of traffic over a day:

Schools starts; morning rush hour	7:30-8:30AM
Mid-morning	10:30-11:30PM
Early afternoon	12:30-1:30PM
School is out.	2:15-3:15PM
Afternoon rush hour	4:30-5:30PM
Early evening	6:30-7:30PM

These time periods were used each year for each site.

Methods for Counting

Counts were performed each year on days when school was in session and businesses open--two types of institutions that brought many non-residents into the neighborhood. The three waves were conducted in similar weather, on relatively sunny spring days; counting was not done during rain, snow, or very cold temperatures.

Counters were stationed at mid-block sites. Each pedestrian who passed in front of the counter, on either side of the street, was counted.** Pedestrians counted were categorized according to four dimensions:

**Because of the volume of traffic on Sigourney Street Bridge, each side of the street was considered a site and counted separately.

- direction of movement
- sex
- racial or ethnic background (white, black and other, primarily Spanish)
- age (preteen, under 13; teenagers, 13-19, young adult, 20-35; middle-aged, 36-64; elderly, 65 or older)

• Very broad age categories were used because of the difficulty of judging precise age by observation. It was also expected that it would be difficult to distinguish Spanish from whites by observation in some cases. Therefore, a rule was made: only pedestrians who were obviously Spanish (e.g., because they were speaking Spanish) were to be counted as "other"; whites who were not obviously Spanish were to be counted as white.

Six or seven counters were hired for each wave. They were trained as to the rules for counting and the forms to be used. The training included a practice counting period on street, followed by a group discussion, led by their trainer, of problems that arose. Figures 7 and 8 are copies of the written instructions given to counters in each wave. Figure 9 shows the arrangement of the counting form used each year.

Reliability of the Data

Because the same sites, times and methods for counting were used for each wave of data collection, the data provide comparable estimates of the volume of pedestrian traffic for each block and time that counts were performed. However, since counts were done on one day only, it is possible that there is day-to-day variability that will randomly confound analyses. We are not sure how stable counts such as these are.

As noted above, distinguishing the racial and age groups of pedestrians counted was difficult to do by observation. However, the use of broad age

Figure 7

GENERAL INSTRUCTIONS TO PEDESTRIAN COUNTERS

MEMORANDUM

TO: Pedestrian Counters

June 3, 1977

FROM: Barbara Cardillo, Survey Research Program

RE: Instructions for Pedestrian Counts

Attached you will find the sites listed at which you are to do your pedestrian counts. These counts at each site are to be completed during the following six-hour periods:

7:30-8:30AM
10:30-11:30AM
12:30- 1:30PM

2:15-3:15PM
4:30-5:30PM
6:30-7:30PM

You are to judge the following characteristics of each pedestrian as indicated on the forms provided:

1. Direction in which the person is moving - south or east being "inbound", toward Farmington Avenue or downtown; north or west being "outbound", away from Farmington Avenue or downtown.
2. Sex of each pedestrian.
3. Race of each pedestrian.
4. Age of each pedestrian - grouping ages into five categories: preteen (under 13 years of age); teen (13-19); young adult (20-35); middle age (36-64); or elderly (65 or older).

A separate form is to be completed for each time period at each site. Please make certain that you fill in your name, the street location, the cross streets, the exact time begun, time ended, and the date on each form at each time at each location. A separate form is to be used for each time period.

The counts are to be completed on the first non-rainy, non-threatening days starting Monday, June 6, not including Saturday or Sunday. In case of doubtful weather, Rudy Brooks will decide by 7:00AM whether or not the counting should take place that day. If there is any question about the weather, it is important that all counters hear from him so that the same decision (whether to count or not) is made for all sites. Each site must be counted on one day, not split between more than one day.

If you have any problems, contact Rudy Brooks at the Hartford Institute of Criminal and Social Justice in Hartford at 527-1866.

GOOD LUCK!! HOPE FOR THE SUN TO SHINE!

Figure 8

SPECIFIC RULES FOR COUNTING PEDESTRIANS

NOTES FOR COUNTERS

Supplies needed:

Clipboards
Pencils
Recording forms - 6 for each site
Assignment map
Letter from Hartford Institute
Return envelopes - 1 for each day

1. Stand in the middle of the block indicated. With a few exceptions, the site at which the previous counter stood has been recorded. If this previous site is not in the middle of the block, choose a more appropriate spot. Record at top of each form where you stand while counting. Count all pedestrians who pass by or in front of you.
2. In some cases it may be difficult to distinguish between Spanish origin and white. If person is speaking Spanish, is part of a group whose other members are obviously Spanish, etc., count as Spanish, i.e., "other". Use your best judgement. If you observe no justification for classifying an individual as non-white, count that person as white.
3. Please observe time periods carefully. It is important that you do so in order that the data are comparable.
4. At the end of the day, put completed forms in return envelope and mail immediately to Survey Research Program.

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Figure 9 PEDESTRIAN COUNTING SHEET

Street: _____

Time Began: _____

Cross Streets: _____

Time Ended: _____

Counter's Name: _____

Date: _____

	() SOUTH		() EAST		INBOUND	
	WHITE		BLACK		OTHER	
	Male	Female	Male	Female	Male	Female
PRETEEN Under 13						
TEENAGER 13-19						
YOUNG ADULT 20-35						
MIDDLE AGE 36-64						
ELDERLY Over 65						

	() NORTH		() EAST		OUTBOUND	
	WHITE		BLACK		OTHER	
	Male	Female	Male	Female	Male	Female
PRETEEN Under 13						
TEENAGER 13-19						
YOUNG ADULT 20-35						
MIDDLE AGE 36-64						
ELDERLY Over 65						

categories and of a specific rule for distinguishing Spanish reduces the error in these counts and makes the data comparable across sites and time. The training counters received insured that they understood their task and used the rules in the same way.

Because the counts were performed on a block by block basis (and because pedestrians were not counted on each block in the area) it is difficult to make absolutely accurate inferences about traffic flow patterns from these data. Similarly, it is difficult to adjust sums of counts from sites along the same street or from those on intersecting streets so that pedestrians passing more than one counter are counted only once; therefore, totals in tables necessarily are an overestimation of the actual number of people observed to some extent. However, there is no reason to believe that the amount of such overestimation changed from one year to the next.

Police Record Data

Types of Data Obtained

The Hartford Police Department (HPD) provided several types of data from its Management Information Division, its Records Division and its Data Analysis Unit throughout the project period. For the most part, these data cover the period January 1971 through June 1977 and were provided for the two original target areas, Asylum Hill and Clay Hill/South Arsenal, and for the city as a whole. The data thus obtained are as follows.

Incidence of Crime. Data on crime incidence came from police reports. They include aggregated incidences of violent crimes (murder, forcible rape, robbery) property crimes (burglary, larceny, auto-theft), robbery and burglary for Hartford as a whole.

In addition, the numbers and aggregated rates of certain crimes were obtained for Asylum Hill, Clay Hill/South Arsenal and the city. These crimes included residential robbery, other robbery and pursesnatch.

Location and Time of Target Crimes. The geographic locations of residential burglaries, street robberies and pursesnatches reported to police were taken from police reports of these crimes for Asylum Hill and Clay Hill/South Arsenal and noted on maps of the areas. Data on time of occurrence of street robberies and pursesnatches were also coded for the two target areas.

Arrests. The number of arrests made for residential burglaries and street robberies/pursesnatches committed in Asylum Hill was obtained from police arrest record data covering the period July 1974 through June 1977.

Offender Residence. The addresses of arrested burglars and robbers operating in Asylum Hill were taken from police arrest records. These data provide the information available on residential mobility of Asylum Hill offenders during the project period.

Calls for Service. Two types of data were obtained from police records of calls for service. First were cross tabulations of the total number of calls answered by patrol officers assigned to each district. These data allowed computation of crossover rates. Second, we obtained data on the results of calls for service for residential burglaries for the city as a whole, including the total number, the numbers found by the patrol officer answering the call to be unfounded, and the number for which no report was filed, a report was filed, and an arrest made.

Reliability of the Data

Incidence of Crime. Police can only record crimes they know about, and for much of their knowledge they must depend upon reports from citizens.

Victimization surveys have consistently shown that a substantial amount of crime is never reported to police, though more serious types of crime--those inflicting more serious loss or injury on the victim--are more likely to be reported than not. Also, police have some discretion about whether to file formal reports for crimes reported to them, indeed in deciding whether an actual offense has occurred. Their exercising this discretion in the matter of record-keeping is affected by departmental regulations and procedures, and by other departmental events.

Three occurrences in the HPD affected its record-keeping practices, and thus the record data, between the time the Hartford project began in 1973 and the time the present evaluation period ended in June 1977. First, in April 1974 a new police chief was appointed. Prior to his taking office, HPD crime reporting procedures differed from UCR guidelines, and the new chief instituted use of UCR procedures.

Second, a contract dispute existed between the local International Brotherhood of Police Officers and the city of Hartford for much of the project period. In January 1975, the two groups began negotiating a new contract, to take effect July 1, 1975. That year was spent in negotiation and arbitration. Early in 1976, the union began to resort to other tactics to force a settlement, encouraging patrol officers to engage in such things as work slowdowns, ticket blitzing and absenteeism. The contract dispute lasted until early 1977.

Third, in mid-1976, HPD began to computerize the data it gathered, including incident record reports. This required some changes in the forms and procedures used to record information; there were, however, no official changes in definitions used to categorize crimes.

These three occurrences apparently affected the crime incident report data in different ways, making it difficult to derive estimates of crime rates from them that are comparable across time. The adoption of UCR record keeping procedures was followed by an apparent substantial increase in crime in 1975. As an example, the residential burglary rate for the city, estimated from police data, more than doubled between 1973 and fiscal year 1974-1975, while comparable victimization rates (based on the UCR definitions) indicate a much less severe increase. The ratio of police record to victimization survey rates for these periods changed from .40 to .55. Before mid-1974, HPD's crime reporting procedures differed from UCR guidelines in ways that probably resulted in substantial underreporting, as compared to places following the guidelines. For example, HPD did not count attempted and non-forcible burglaries as burglaries; and it virtually never included a forcible pursesnatch as a robbery.

On the other hand, the contract dispute and the procedural changes associated with computerization may have acted together to discourage patrol officers from filing formal reports. The ratio of residential burglary rates, estimated from police data, to comparable victimization rates, again changed from .55 for fiscal year 1975 to .32 for fiscal year 1977. Data on the results of calls for service (CFS) for residential burglary for these years indicate that the proportion for which no report was filed increased somewhat.

These factors taken together led us to conclude that crime rates from police record data could not be compared over time. We did not feel that we could correct the figures, or compensate for the changed procedures, in any way that would be meaningful. Hence, crime rates from police records are not used in this report.

Other Types of Police Data. Since 1974, the information required to be provided in an incident report has remained the same. Hence, the data on location and time of the target crimes in Asylum Hill is comparable over time. Arrest reports are (and have been) required and the residence of the arrested offender has always been a part of this report, though of course reports are sensitive to changes in arrest patterns.

The key assumption in using these data is the extent to which events or individuals in police files are representative or, at least, that biases are consistent over time. Since police records were the only source of information on the location of crimes or the characteristics of offenders, we relied on the data, at the same time trying to be judicious in our interpretation.

Police Attitude Questionnaires

Method of Administering the Questionnaires

Data on police attitudes were collected in two waves, the first in 1975, and the second in June, 1977. Patrol officers and sergeants in both District 5 neighborhood teams (those assigned to Asylum Hill and those to Clay Hill/South Arsenal) were surveyed. Self-administered questionnaires and mail-back techniques were used.

Most questions asked in 1975 were repeated in 1977, with additional questions about the street changes and about participation in police-community activities. Topics covered in both years include: team-policing and related items on patrol tactics and participation in team decision-making; perceptions of police-community relations; perceptions of team area crime problems and the team area as a place to live; perceived level of resident fear; perceptions of team success in past years in clearing cases, arrests and reducing

crime; and job satisfaction.

In both years, packets were distributed to all team members (except team commanders and the district commander) by the officer in charge. In 1975, the packets included a questionnaire, a letter from the Survey Research Program explaining the study which also stated that replies would remain anonymous and confidential, and a postage-paid envelope to be used to mail back the completed questionnaire. In 1977, the packets included these materials as well as a letter from the head of HPD Field Services assuring team members of the confidentiality of their responses and urging the officers to respond. These packets also included a self-addressed, postage-paid postcard stating the questionnaire had been returned. Officers were asked to return the postcard when they returned the questionnaire. This allowed follow-up packets to be distributed only to those who had not responded to the first round while maintaining anonymity of respondents. Three rounds of follow-up distribution were conducted for the first wave, and two for the second.

In 1975, 41 of the 56 officers then assigned to the two teams responded (a response rate of 73 percent); 17 of these responses were from Asylum Hill officers and 25 from Clay Hill/South Arsenal officers. In 1977, 35 of 45 officers responded (for a response rate of 78 percent); 18 responses were from Asylum Hill officers, 13 from Clay Hill/South Arsenal officers, and four from relief officers who worked in either area depending on need.

Reliability of the Data

Because all officers were asked to fill out the questionnaire, there is no sampling error in the data. There was, however, the chance for non-response bias. Non-response bias may occur when those who do not answer a

questionnaire (or some portion of it) are concentrated in some subgroup of the population surveyed; the perceptions and experiences of such a subgroup will be underrepresented. Of course, the higher the response rate, the less likely there is to be non-response bias in the data.

The overall response rates for the two waves of data collection on police attitudes were relatively good for a self-administered, mail-back questionnaire. Since this report has concentrated on the data from the Asylum Hill team, it should be noted that there was a difference in response between the two waves. In 1975, about a third of the 26 men then assigned to the Asylum Hill area did not return a questionnaire for reasons unknown to us. In 1977, however, nearly all of the officers working in the area, all or part of the time, returned a questionnaire.

Police Monitoring

Methods of Monitoring the Neighborhood Police

The responsibility for monitoring the neighborhood police was shared by the Hartford Institute and the project team's expert in police. The police assigned to District 5 were divided into two teams, one assigned to Asylum Hill and the other to the rest of the district. The project police expert generally confined his attention to the Asylum Hill team; the Institute staff worked with and monitored the development of both teams. The monitoring activities described below were carried out from January 1975, when the teams were first established, through the formal evaluation year, which ended in June 1977. Several methods were used, as described below.

Maintaining Data Files. Information collected by the Institute included police record data for each team area, district crossover rates, administrative information (personnel assignments, use of foot vs. motor patrol,

etc.), and information on police-community activities.

Unstructured Participant Observations and Interviews. About once a month, the police expert spent a day with the Asylum Hill team as did the Institute staff member assigned to monitor the police. Their primary activity was riding with individual officers on patrol for two to three hours at a time. During these rides they conducted informal interviews regarding the officer's perceptions of team-policing; awareness and opinions of community involvement in public safety efforts; awareness and opinions of the physical changes; and special concerns (positive and negative) of the officer. They also spent time on these field trips at the NTP office, and time with the NTP commander. Notes from these field trips were summarized periodically in terms of police program goals.

Weekly Meetings Between Team Commanders and Hartford Institute Staff.

These were informal discussions of current, specific public safety problems in District 5. Problems discussed included: HPD reported crime statistics for each team area; available weekly manpower (injury rate, sick leave, off-duty numbers); effective use by team leaders of their time; community concerns determined from community meetings; progress of on-going community crime prevention programs; and other relevant information developed informally.

A written record of these discussions was kept.

Attendance at Team Meetings. Institute staff attended the team meetings held during the early implementation period. Particular note was taken of the kind of information being given patrol officers by their supervisors, the kind of issues and problems raised by the patrol officers, and patrol officers' participation in decision-making. However, as noted in the body of the report, team meetings were infrequent.

Reliability of the Data

These data were intended to serve as the basis of a description of what was implemented and how this was done. The specific, measurable goals for the police component provided a structure for the organization and summary of the data kept. The use of several monitoring methods allows us to look for regularities in the data. Although much of the data are qualitative, they seem appropriate, in combination with other available information, for their intended purposes.

APPENDIX B

SUPPLEMENTAL DATA ON RESULTS

This appendix includes two general sets of data. The first consists of supplemental tables presenting data discussed in Chapter V. These are arranged according to sections of that chapter in which they are discussed, as listed below.

The second presents data indicating that the program may have affected subgroups in the neighborhood differently. These are preceded by a brief discussion of the types of differences observed for selected key variables in the model.

Supplemental Tables

Table Number

Impact on Fear of Crime

B1 - B3

How the Program Worked:

The Physical Environment and Non-Resident Use of the Neighborhood

B4 - B8

The Physical Environment and Residents Use of Space

B9 - B13

Residents' Relationships to the Neighborhood and Neighbors

B14 - B23

The Relationship Between Police and Citizens

B24 - B30

Offenders and Residents

B31 - B32

Offenders and Police

B33 - B36

Indications of Differential Program Effects

B37 - B53

Table B1

DEGREE OF WORRY ABOUT BURGLARY DURING THE DAYTIME WHEN NO ONE IS AT HOME

	<u>1973</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>
<u>North Asylum Hill</u>				
Very worried	18%	20%	19%	21%
Somewhat worried	20	25	20	19
Little worried	23	18	23	24
Not worried	<u>39</u>	<u>37</u>	<u>38</u>	<u>36</u>
TOTAL	100	100	100	100
(N)	(93)	(88)	(77)	(232)
<u>South Asylum Hill</u>				
Very worried	11%	11%	9%	12%
Somewhat worried	14	16	17	21
Little worried	19	22	25	20
Not worried	<u>56</u>	<u>51</u>	<u>49</u>	<u>47</u>
TOTAL	100	100	100	100
(N)	(92)	(88)	(63)	(118)
<u>Total City</u>				
Very worried	17%	20%		19%
Somewhat worried	18	21		25
Little worried	32	23		25
Not worried	<u>33</u>	<u>56</u>		<u>31</u>
TOTAL	100	100		100
(N)	(880)	(555)		(885)

*Data not available for this time period.

Table B2

PERCEPTION OF ROBBERY AS A NEIGHBORHOOD CRIME PROBLEM

	<u>1973</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>
<u>North Asylum Hill</u>				
Big problem	20%	21%	34%	26%
Some problem	38	41	30	45
Almost no problem	<u>42</u>	<u>38</u>	<u>36</u>	<u>29</u>
TOTAL	100	100	100	100
(N)	(92)	(84)	(73)	(226)
<u>South Asylum Hill</u>				
Big problem	22%	20%	35%	35%
Some problem	36	44	37	53
Almost no problem	<u>42</u>	<u>36</u>	<u>28</u>	<u>12</u>
TOTAL	100	100	100	100
(N)	(90)	(83)	(59)	(115)
<u>Total City</u>				
Big problem	14%	17%	*	15%
Some problem	32	25		30
Almost no problem	<u>54</u>	<u>58</u>		<u>55</u>
TOTAL	100	100		100
(N)	(868)	(541)		(880)

*Data not available for this time period.

Table B3

DEGREE OF WORRY ABOUT BEING ROBBED OR ASSAULTED IN THE
NEIGHBORHOOD DURING THE DAYTIME

	<u>1973</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>
<u>North Asylum Hill</u>				
Very worried	10%	8%	15%	9%
Somewhat worried	12	11	14	13
Little worried	16	22	19	20
Not worried	<u>62</u>	<u>59</u>	<u>52</u>	<u>58</u>
TOTAL	100	100	100	100
(N)	(93)	(88)	(73)	(232)
<u>South Asylum Hill</u>				
Very worried	8%	5%	8%	7%
Somewhat worried	13	8	16	18
Little worried	25	25	20	27
Not worried	<u>54</u>	<u>62</u>	<u>56</u>	<u>48</u>
TOTAL	100	100	100	100
(N)	(91)	(87)	(62)	(118)
<u>Total City</u>				
Very worried	6%	8%	*	11%
Somewhat worried	12	12		12
Little worried	26	17		20
Not worried	<u>56</u>	<u>63</u>		<u>57</u>
TOTAL	100	100		100
(N)	(882)	(554)		(885)

*Data not available for this time period.

Table B4

PERCEIVED AMOUNT OF VEHICULAR TRAFFIC IN FRONT OF HOME
DURING THE DAYTIME WITHIN NORTH ASYLUM HILL

	<u>1976</u>	<u>1977</u>
Very busy	28%	28%
Busy	36	28
Moderate	28	29
Light	7	8
Very light	<u>1</u>	<u>7</u>
TOTAL	100	100
(N)	(71)	(228)

Table B5

PERCEIVED AMOUNT OF VEHICULAR TRAFFIC, IN FRONT OF HOME
DURING THE DAYTIME WITHIN NORTH ASYLUM HILL BY TYPE
OF STREET CHANGES FOR 1977

	<u>Blocked</u>	<u>Narrowed</u>	<u>Untreated</u>
Very busy	14%	19%	44%
Busy	29	18	35
Moderate	25	48	19
Light	15	10	1
Very light	<u>17</u>	<u>5</u>	<u>1</u>
TOTAL (N)	100 (62)	100 (68)	100 (96)

Table B6

PERCEIVED NUMBER OF PEOPLE USUALLY ON STREET
IN FRONT OF HOME DURING THE DAY
WITHIN NORTH ASYLUM HILL

	<u>1975</u>	<u>1976</u>	<u>1977</u>
A lot	33%	37%	38%
Some	21	26	20
A few	30	23	27
Almost none	<u>16</u>	<u>14</u>	<u>15</u>
TOTAL (N)	100 (168)	100 (76)	100 (232)

Table B7

PERCEIVED NUMBER OF PEOPLE USUALLY ON STREET
IN FRONT OF HOME AFTER DARK
WITHIN NORTH ASYLUM HILL

	<u>1975</u>	<u>1976</u>	<u>1977</u>
A lot	17%	— 11%	22%
Some	25	26	15
A few	26	32	31
Almost none	<u>32</u>	<u>31</u>	<u>32</u>
TOTAL (N)	100 (81)	100 (76)	100 (232)

Table B8

PERCEIVED PROPORTION OF PEOPLE SEEN ON THE
STREET WHO LIVE IN THE NEIGHBORHOOD

	<u>1975</u>	<u>1976</u>	<u>1977</u>
<u>North Asylum Hill</u>			
Mostly neighborhood residents	53%	43%	42%
About half neighborhood residents	28	35	30
Mostly strangers	<u>19</u>	<u>22</u>	<u>27</u>
TOTAL (N)	100 (84)	100 (63)	100 (212)
<u>Total City</u>			
Mostly neighborhood residents	63%	*	68%
About half neighborhood residents	26		18
Mostly strangers	<u>11</u>		<u>14</u>
TOTAL (N)	100 (539)		100 (841)

Table B9

PERCENT WHO LIKE TO USE THE PARK NEAR THEIR HOME**

	<u>1975</u>		<u>1976</u>		<u>1977</u>	
	%	(N)	%	(N)	%	(N)
North Asylum Hill	26%	(66)	26%	(54)	36%	(177)
Total City	50%	(341)	*		48%	(634)

*Data not available for this time period.

**Includes only those respondents who report living near a park.

Table B10

MEAN NUMBER OF DAYS IN PAST WEEK SPENT OUTSIDE AROUND THE HOUSE

	<u>1975</u>	<u>1976</u>	<u>1977</u>
<u>North Asylum Hill</u>			
Mean (N)	2.0 (88)	1.5 (77)	1.6 (231)
<u>Total City</u>			
Mean (N)	2.7 (552)	*	2.5 (876)

*Data not available for this time period.

Table B11

AGE DISTRIBUTION OF PEDESTRIANS

<u>Age</u>	<u>Count</u>		<u>Percent Change</u>	<u>Percent</u>	
	<u>1976</u>	<u>1977</u>		<u>1976</u>	<u>1977</u>
Less Than 13*	528	540	+ 2	10%	10%
13-19*	835	735	-12	15	13
20-35	2906	2903	0	56	53
36-60	828	1167	+41	16	21
More Than 60	<u>161</u>	<u>160</u>	- 1	<u>3</u>	<u>3</u>
TOTAL	5258	5505	+ 5	100	100

* Excludes persons under 20 counted during hours of travel to and from school (7:30 - 8:30 AM and 2:15 - 3:15 PM).

Table B12
SEX OF PEDESTRIANS COUNTED

<u>Sex*</u>	<u>Count</u>		<u>Percent Change</u>	<u>Percent</u>	
	<u>1976</u>	<u>1977</u>		<u>1976</u>	<u>1977</u>
Male	3134	3093	- 1	60%	56%
Female	<u>2124</u>	<u>2412</u>	<u>+14</u>	<u>40</u>	<u>44</u>
TOTAL	5258	5505	+ 5	100	100

* Excludes persons under 20 counted during hours of travel to and from school (7:30 - 8:30 AM and 2:45 - 3:15 PM).

Table B13

RACIAL BACKGROUND OF PEDESTRIANS COUNTED

Racial Background*	Count		Percent Change	Percent	
	<u>1976</u>	<u>1977</u>		<u>1976</u>	<u>1977</u>
White	1161	1305	+12	22%	24%
Black	3274	3326	+ 2	62	60
Other	<u>823</u>	<u>874</u>	<u>+ 6</u>	<u>16</u>	<u>16</u>
TOTAL	5258	5505	+ 5	100	100

* Excludes persons under 20 counted during hours of travel to and from school (7:30 - 8:30 AM and 2:15 - 3:15 PM).

Table B14

CHANGE IN THE NEIGHBORHOOD AS A PLACE TO LIVE IN
THE PAST YEAR

	<u>1975</u>	<u>1976</u>	<u>1977</u>
<u>North Asylum Hill</u>			
Better,	19%	12%	18%
About the same	45	38	42
Worse	<u>36</u>	<u>50</u>	<u>40</u>
TOTAL	100	100	100
(N)	(88)	(74)	(229)
<u>Total City</u>			
Better	7%	*	13%
About the same	57		59
Worse	<u>36</u>		<u>28</u>
TOTAL	100		100
(N)	(555)		(885)

*Data not available for this time period.

Table B15

EXPECTATION OF NEIGHBORHOOD AS A PLACE
TO LIVE IN FIVE YEARS

	<u>1975</u>	<u>1976</u>	<u>1977</u>
<u>North Asylum Hill</u>			
Better	31%	20%	34%
About the same	23	38	21
Worse	<u>46</u>	<u>42</u>	<u>45</u>
TOTAL	100	100	100
(N)	(79)	(70)	(216)
<u>Total City</u>			
Better	19%	*	21%
About the same	35		38
Worse	<u>46</u>		<u>41</u>
TOTAL	100		100
(N)	(517)		(812)

*Data not available for this time period.

Table B16

HOW RESIDENTS FEEL ABOUT THE NEIGHBORHOOD

	<u>1975</u>	<u>1976</u>	<u>1977</u>
<u>North Asylum Hill</u>			
Feel part of a neighborhood here	39%	24%	33%
Just a place to live	<u>61</u>	<u>76</u>	<u>67</u>
TOTAL	100	100	100
(N)	(86)	(76)	(228)
<u>Total City</u>			
Feel part of a neighborhood here	46%	*	50%
Just a place to live	<u>54</u>		<u>50</u>
TOTAL	100		100
(N)	(549)		(863)

*Data not available for this time period.

Table B17

PERCEPTION OF HELPFULNESS OF NEIGHBORS

	<u>1975</u>	<u>1976</u>	<u>1977</u>
<u>North Asylum Hill</u>			
Help each other	46%	21%	35%
Go their own ways	<u>54</u>	<u>79</u>	<u>65</u>
TOTAL . <i>u</i>	100	100	100
(N)	(87)	(73)	(223)
 <u>Total City</u>			
Help each other	48%	*	48%
Go their own ways	<u>52</u>		<u>52</u>
TOTAL	100		100
(N)	(548)		(847)

*Data not available for this time period.

Table B18

PERCEPTION OF SELLING OF ILLEGAL DRUGS AS A NEIGHBORHOOD
CRIME PROBLEM

	<u>1975</u>	<u>1976</u>	<u>1977</u>
<u>North Asylum Hill</u>			
Big problem	41%	51%	43%
Some problem	34	33	34
Almost no problem	<u>25</u>	<u>16</u>	<u>23</u>
TOTAL	100	100	100
(N)	(81)	(66)	(218)
<u>Total City</u>			
Big problem	19%	*	21%
Some problem	26		27
Almost no problem	<u>55</u>		<u>52</u>
TOTAL	100		100
(N)	(523)		(822)

*Data not available for this time period.

Table B19

PERCEPTION OF USE OF ILLEGAL DRUGS AS A NEIGHBORHOOD
CRIME PROBLEM

	<u>1975</u>	<u>1976</u>	<u>1977</u>
<u>North Asylum Hill</u>			
Big problem	39%	50%	48%
Some problem	38	35	33
Almost no problem	<u>23</u>	<u>15</u>	<u>19</u>
TOTAL	100	100	100
(N)	(82)	(66)	(218)
<u>Total City</u>			
Big problem	19%	*	23%
Some problem	31		34
Almost no problem	<u>50</u>		<u>43</u>
TOTAL	100		100
(N)	(519)		(838)

*Data not available for this time period.

Table B20

PERCEPTION OF LOITERING BY TEENAGERS AS A NEIGHBORHOOD
PROBLEM

	<u>1975</u>	<u>1976</u>	<u>1977</u>
<u>North Asylum Hill</u>			
Big problem	38%	43%	35%
Some problem	31	19	34
Almost no problem	<u>31</u>	<u>38</u>	<u>31</u>
TOTAL	100	100	100
(N)	(86)	(71)	(227)
<u>Total City</u>			
Big problem	26%	*	23%
Some problem	25		34
Almost no problem	<u>49</u>		<u>43</u>
TOTAL	100		100
(N)	(547)		(873)

*Data not available for this time period.

Table B21
PERCEPTION OF LOITERING BY MEN AS A NEIGHBORHOOD
PROBLEM

	<u>1975</u>	<u>1976</u>	<u>1977</u>
<u>North Asylum Hill</u>			
Big problem	33%	36%	33%
Some problem	34	28	31
Almost no problem	<u>33</u>	<u>36</u>	<u>36</u>
TOTAL	100	100	100
(N)	(85)	(72)	(231)
<u>Total City</u>			
Big problem	17%	*	14%
Some problem	20		23
Almost no problem	<u>63</u>		<u>63</u>
TOTAL	100		100
(N)	(545)		(875)

*Data not available for this time period.

Table B22

PERCEPTION OF DRUNKEN MEN AS A NEIGHBORHOOD
CRIME PROBLEM

	<u>1975</u>	<u>1976</u>	<u>1977</u>
<u>North Asylum Hill</u>			
Big problem	23%	19%	27%
Some problem	36	37	30
Almost no problem	<u>41</u>	<u>44</u>	<u>43</u>
TOTAL	100	100	100
(N)	(86)	(71)	(229)
<u>Total City</u>			
Big problem	15%	*	11%
Some problem	22		24
Almost no problem	<u>63</u>		<u>65</u>
TOTAL	100		100
(N)	(549)		(869)

*Data not available for this time period.

Table B23

PERCEPTION OF PROSTITUTION AS A NEIGHBORHOOD
CRIME PROBLEM

	<u>1975</u>	<u>1976</u>	<u>1977</u>
<u>North Asylum Hill</u>			
Big problem	32%	49%	60%
Some problem	31	28	20
Almost no problem	<u>37</u>	<u>23</u>	<u>20</u>
TOTAL	100	100	100
(N)	(85)	(67)	(227)
<u>Total City</u>			
Big problem	10%	*	10%
Some problem	13		17
Almost no problem	<u>77</u>		<u>73</u>
TOTAL	100		100
(N) :	(532)		(857)

*Data not available for this time period.

Table B24

ASYLUM HILL POLICE PERCEPTION OF CHANGE IN TEAM AREA
AS A PLACE TO LIVE IN THE PAST YEAR

	<u>Fall, 1975</u>	<u>Spring, 1977</u>
Better	7%	23%
About the same	29	63
Worse	<u>64</u>	<u>14</u>
TOTAL (N)	100 (14)	100 (22)

Table B25

PERCEPTION OF NUMBER OF NEIGHBORS WHO WOULD CALL THE
POLICE IF SAW A BURGLARY HAPPENING

	<u>1975</u>	<u>1976</u>	<u>1977</u>
<u>North Asylum Hill</u>			
All or most of them**	37%	25%	45%
Some of them	30	32	25
A few of them or almost none**	<u>33</u>	<u>43</u>	<u>30</u>
TOTAL	100	100	100
(N)	(86)	(66)	(227)
<u>Total City</u>			
All or most of them**	49%	*	59%
Some of them	26		20
A few of them or almost none**	<u>25</u>		<u>21</u>
TOTAL	100		100
(N)	(524)		(850)

*Data not available for this time period.

**Combined response categories.

Table B26

RESIDENT CALLS OR REPORTS TO POLICE

	<u>1975</u>	<u>1976</u>	<u>1977</u>
<u>North Asylum Hill</u>			
Percent who would report attempted burglary	82%	79%	83%
(N)	(88)	(75)	(232)
Percent burglaries reported in past year	77		73
(N)	(13)		(30)
Percent who called police for any reason in past year	42	44	40
(N)	(88)	(75)	(232)
<u>Total City</u>			
Percent who would report attempted burglary	87%	*	86%
(N)	(556)		(885)
Percent burglaries reported in past year	76	*	74
(N)	(68)		(114)
Percent who called police for any reason in past year	37	1*	39
(N)	(555)		(885)

*Data not available for this time period.

Table B27

PERCEPTION OF NUMBER OF RESIDENTS WILLING TO ANSWER QUESTIONS TO HELP
POLICE LOCATE PERSON WHO COMMITTED A CRIME

	<u>1975</u>	<u>1976</u>	<u>1977</u>
<u>North Asylum Hill</u>			
All or most of them**	37%	25%	26%
Some of them	30	32	32
A few of them or almost none**	<u>33</u>	<u>43</u>	<u>42</u>
TOTAL	100	100	100
(N)	(85)	(65)	(228)
<u>Total City</u>			
All or most of them**	49%	*	46%
Some of them	26		26
A few of them or almost none**	<u>25</u>		<u>28</u>
TOTAL	100		100
(N)	(527)		(847)

*Data not available for this time period.

**Combined response categories.

Table B28

PERCENT WHO PERCEIVE HARTFORD POLICE RESPOND "RIGHT AWAY" WHEN
SOMEONE IN NEIGHBORHOOD CALLS FOR HELP BY RACE**

	Black		White	
	%	(N)	%	(N)
<u>North Asylum Hill</u>				
1975	66	(34)	76	(46)
1976	-		53	(43)
1977	39	(93)	70	(116)
<u>Total City</u>				
1975	46	(195)	65	(278)
1976	*		*	
1977	47	(283)	62	(459)

** As opposed to "taking a while" or "don't know".

- There is an insufficient number of cases within this category to produce meaningful results (N<30).

* Data not available for this time period.

Table B29

PERCENT WHO PERCEIVE HARTFORD POLICE PROTECTION OF PEOPLE IN THE NEIGHBORHOOD
IS "VERY GOOD" OR "GOOD ENOUGH" BY RACE**

	Black % (N)	White % (N)
<u>North Asylum Hill</u>		
1975	82 (31)	76 (43)
1976	-	66 (40)
1977	49 (85)	76 (113)
<u>Total City</u>		
1975	51 (186)	84 (267)
1976	*	*
1977	55 (264)	81 (437)

** As opposed to "not so good" or "not good at all".

- There is an insufficient number of cases within this category to produce meaningful results (N<30).

* Data not available for this time period.

Table B30

PERCENT WHO PERCEIVE HARTFORD POLICE TREAT PEOPLE IN NEIGHBORHOOD
 "VERY WELL" OR "WELL ENOUGH" BY RACE**

	Black % (N)	White % (N)
<u>North Asylum Hill</u>		
1975	-	91 (44)
1976	-	90 (37)
1977	49 (81)	95 (105)
<u>Total City</u>		
1975	65 (174)	92 (253)
1976	*	*
1977	67 (256)	92 (415)

** As opposed to "not so well" or "not well at all"

- There is an insufficient number of cases within this category to produce meaningful results (N<30).

* Data not available for this time period.

Table B31

PERCEPTION OF WHAT NEIGHBORS WOULD DO IF SAW SUSPICIOUS STRANGERS
NEAR RESIDENT'S DOOR

	<u>1975</u>	<u>1976</u>	<u>1977</u>
<u>North Asylum Hill</u>			
Check or call the police **	65%	57%	62%
Ignore it	<u>35</u>	<u>43</u>	<u>38</u>
TOTAL	100	100	100
(N)	(81)	(66)	(223)
<u>Total City</u>			
Check or call the police **	71%	*	75%
Ignore it	<u>29</u>		<u>25</u>
TOTAL	100		100
(N)	(508)		(834)

*Data not available for this time period.

**Combined response categories.

Table B32

PERCEIVED AMOUNT OF NEIGHBORHOOD CONCERN OVER
CRIME HAPPENING TO OTHERS

	<u>1975</u>	<u>1976</u>	<u>1977</u>
<u>North Asylum Hill</u>			
A great deal of concern	24%	34%	34%
Some concern	59	38	46
Not much concern	<u>17</u>	<u>28</u>	<u>20</u>
TOTAL	100	100	100
(N)	(83)	(72)	(227)
<u>Total City</u>			
A great deal of concern	35%	*	40%
Some concern	43		45
Not much concern	<u>22</u>		<u>15</u>
TOTAL	100		100
(N)	(528)		(854)

*Data not available for this time period.

Table B35

ASYLUM HILL POLICE PERCEPTION OF DRUNKEN MEN
AS A CRIME PROBLEM IN THEIR TEAM AREA

	<u>Fall, 1975</u>	<u>Spring, 1977</u>
Big problem	41%	14%
Some problem	41	77
Almost no problem	<u>18</u>	<u>9</u>
TOTAL	100	100
(N)	(17)	(22)

Table B34

ASYLUM HILL POLICE PERCEPTION OF GROUPS OF MEN IN STREETS, OR
PARKS AS A CRIME PROBLEM IN THEIR TEAM AREA

	<u>Fall, 1975</u>	<u>Spring, 1977</u>
Big problem	53%	32%
Some problem	41	68
Almost no problem	<u>6</u>	<u>0</u>
TOTAL	100	100
(N)	(17)	(22)

Table B35

ASYLUM HILL POLICE PERCEPTION OF GROUPS OF TEENAGERS IN
STREET OR PARKS AS A CRIME PROBLEM IN THEIR TEAM AREA

	<u>Fall, 1975</u>	<u>Spring, 1977</u>
Big problem	65%	32%
Some problem	35	68
Almost no problem	<u>0</u>	<u>0</u>
TOTAL	100	100
(N)	(17)	(22)

Table B36

ASYLUM HILL POLICE PERCEPTION OF PROSTITUTION
AS A CRIME PROBLEM IN THEIR TEAM AREA

	<u>Fall, 1975</u>	<u>Spring, 1977</u>
Big problem	88%	86%
Some problem	12	14
Almost no problem	<u>0</u>	<u>0</u>
TOTAL	100	100
(N)	(17)	(22)

Indications of Differential Program Effects

In Chapter V we saw that there was rather moderate change in some resident perceptions and attitudes expected to be affected by the program, and little or no change in others. North Asylum Hill's population was heterogeneous in a number of ways. Hence, one factor that could account for this pattern, at least potentially, was differential responses of the subgroups of residents to the program.

Detailed investigation of this possibility could not be done within the time and budget constraints of this evaluation. Preliminary examination of the data indicated that the patterns of change for subgroups of residents were too complex to be sorted out and understood easily. This difficulty is exacerbated by the fact that small numbers of cases for the subgroups, particularly in the surveys conducted prior to 1977, make the figures very unstable. Much of the analysis, then, would be uncertain. However, the preliminary analysis indicated that the program may have had differential effects on subgroups of residents. The tables included in this section demonstrate the difficulties of analysis and the kinds of differences observed.

North Asylum Hill residents differed from one another in a number of ways that might have affected their response to a crime prevention program, for example, length of residence, education or income level, family or household composition, age, sex, and racial/ethnic background. Apparent differences in effects were observed most consistently for different age and race groups.

Overall, it appears that middle-aged and older residents, those over 40, and white residents were more positively affected by this program than

other groups. For some perceptions this is fairly straightforward. For example, we noted in Chapter V that one of the most important changes that occurred in North Asylum Hill was increased ease of recognizing strangers in the area. Tables B 37 and B 38 indicate that this change was concentrated among older residents and whites.

The pattern of change appears to differ for the two groups. Older residents, as a group, show a fairly steady increase between 1975 and 1977 in the rate at which they report it is easy to recognize strangers in the area, while for whites the increase is concentrated between 1976 and 1977. However, the number of cases for the subgroups is small for 1975 and 1976, making the percentages for these years unstable. Hence, although we can be certain that change occurred over the two-year period, we cannot be certain when.

Neither blacks nor younger residents show any significant change in ease of stranger recognition. It should be noted that both of these groups found it easier to recognize strangers than their counterparts in 1975. The effect of the change among older residents and whites was to make them more like the other two groups.

Similar patterns may be observed for attitudes and perceptions that showed no apparent change in the North Asylum Hill population as a whole. For example, residents' perceptions of the amount of neighbors' concern over crime happening to others did not appear to change. However, older residents and whites were much more likely to report that neighbors had "a great deal" of such concern in 1977 than they had in 1975 (Tables B 39 - B 40). Again, small numbers of cases for the earlier survey years makes analysis of the year-to-year changes impossible. Again, younger residents' and blacks' perceptions

were more positive than their counterparts' in 1975 and did not change significantly. However, here whites and older residents had become more positive by 1977.

A different pattern of change appears for residents' use of neighborhood spaces (Tables B 41 - B 44). The increase in walking somewhere in the neighborhood and liking to use the park reported in Chapter V, appear only for whites. The effect of the increases is to make this group more like blacks, who had reported greater use of space in 1975 and did not change significantly over time. The younger and older age groups both increased their use of space at about the same rate. Similarly, the increase in having a regular arrangement with neighbors to watch one another's homes is concentrated among whites, with no differences between age groups (Tables B 45 - B 46).

Yet another pattern of change appeared in attitudes toward police. In Chapter V we discussed the significant decline in positive attitudes that occurred among blacks while whites remained positive (Tables B 28 - B 30). A similar decline in positive feeling occurred among younger residents while attitudes among the older age group remained stable (Tables B 47 - B 49).

Finally, on certain attitudes toward the neighborhood and neighbors, subgroups appear to change in opposite directions. Older residents and whites were generally more likely to say they felt part of a neighborhood and that neighbors were the sort who helped each other in 1977 than in 1976, though their feelings in these areas were about the same in 1977 as they had been in 1975 (Tables B 50 - B 53). Younger people and blacks, on the other hand, showed a more or less

steady decline in feeling part of the neighborhood and perceiving neighbors as helpful.

Hence, a variety of patterns of change appear in the data. The small number of cases for subgroups in the survey samples from the earlier years make it impossible to judge with certainty just how much change there was in this resident population or when it occurred. Therefore, detailed analysis of change over time cannot be done for population subgroups.

On the other hand, the consistent apparent impact of the program on older residents and whites is unlikely to have occurred by chance. The fact that positive findings for these subgroups repeatedly appear in the data, regardless of the findings for their counterparts, leads us to conclude that the program probably did affect them. It is appropriate that they should be most affected because, at the time implementation began, it was these two subgroups who were most victimized and most afraid. However, the patterns do point to important limits of the analysis in Chapter V and an area where additional analysis is needed.

Table B37

PERCENT WHO FIND IT EASY TO RECOGNIZE A STRANGER IN THEIR
NEIGHBORHOOD BY AGE

	Less Than 40		40 or More	
	%	(N)	%	(N)
<u>North Asylum Hill</u>				
1975	30	(55)	15	(32)
1976	25	(45)	26	(30)
1977	33	(138)	31	(81)
<u>Total City</u>				
1975	48	(278)	48	(265)
1976	*		*	
1977	53	(417)	50	(411)

* Data not available for this time period.

Table B38

PERCENT WHO FIND IT EASY TO RECOGNIZE A STRANGER IN THEIR
NEIGHBORHOOD BY RACE

	Black % (N)	White % (N)
<u>North Asylum Hill</u>		
1975	44 (32)	9 (48)
1976	-	18 (45)
1977	39 (92)	31 (112)
<u>Total City</u>		
1975	51 (196)	48 (283)
1976	*	*
1977	55 (288)	52 (452)

- There is an insufficient number of cases within this category to produce meaningful results (N<30).

* Data not available for this time period.

Table B39

PERCEIVED AMOUNT OF NEIGHBORHOOD CONCERN OVER
CRIME HAPPENING TO OTHERS BY AGE

	Less Than 40			40 or more		
	<u>75</u>	<u>76</u>	<u>77</u>	<u>75</u>	<u>76</u>	<u>77</u>
<u>North Asylum Hill</u>						
A great deal	29%	38%	21%	16%		58%
Some	57	31	54	62		32
Not Much	<u>14</u>	<u>31</u>	<u>25</u>	<u>22</u>		<u>10</u>
TOTAL	100	100	100	100		100
(N)	(52)	(45)	(140)	(30)		(83)
<u>Total City</u>						
A great deal	36%		37%	35%		43%
Some	45	*	47	41	*	43
Not Much	<u>19</u>		<u>16</u>	<u>24</u>		<u>14</u>
TOTAL	100		100	100		100
(N)	(276)		(427)	(264)		(425)

- There is an insufficient number of cases within this category to produce meaningful results (N<30).

* Data not available for this time period.

Table B40

PERCEIVED AMOUNT OF NEIGHBORHOOD CONCERN OVER CRIME HAPPENING
TO OTHERS BY RACE

	Black			White		
	<u>75</u>	<u>76</u>	<u>77</u>	<u>75</u>	<u>76</u>	<u>77</u>
<u>North Asylum Hill</u>						
A great deal	31%		24% 16%	32%	43%	
Some	47	-	52 73	36	44	
Not Much	<u>22</u>		<u>24</u> <u>11</u>	<u>32</u>	<u>13</u>	
TOTAL	100		100 100	100	100	
(N)	(32)		(91) (45)	(42)	(116)	
<u>Total City</u>						
A great deal	36%		41% 35%		41%	
Some	37	*	49 47	*	43	
Not Much	<u>27</u>		<u>10</u> <u>18</u>		<u>16</u>	
TOTAL	100		100 100		100	
(N)	(188)		(283) (283)		(448)	

- There is an insufficient number of cases for meaningful results (N<30).

* Data not available for this time period

Table B41

PERCENT WHO WALK SOMEWHERE IN THE NEIGHBORHOOD DURING THE DAY
 "ALMOST DAILY" OR "A FEW TIMES A WEEK" BY AGE **

	Less Than 40		40 or More	
	%	(N)	%	(N)
<u>North Asylum Hill</u>				
1975	54	(55)	50	(32)
1976	51	(40)	60	(30)
1977	72	(141)	71	(85)
<u>Total City</u>				
1975	60	(278)	57	(265)
1976	*		*	
1977	67	(426)	50	(425)

** As opposed to walking somewhere in the neighborhood during the day "about once a week", "less often", or "never".

* Data not available for this time period.

Table B42

PERCENT WHO WALK SOMEWHERE IN THE NEIGHBORHOOD DURING THE DAY
 "ALMOST DAILY" OR "A FEW TIMES A WEEK" BY RACE**

	Black % (N)	White % (N)
<u>North Asylum Hill</u>		
1975	64 (34)	50 (48)
1976	-	56 (45)
1977	67 (97)	72 (117)
<u>Total City</u>		
1975	60 (199)	59 (285)
1976	*	*
1977	57 (295)	61 (464)

** As opposed to "about once a week", "less often", or "never".

- There is an insufficient number of cases in this category
 for meaningful results, (N<30).

* Data not available for this time period.

Table B43

PERCENT WHO LIKE TO USE A PARK NEAR HOME BY AGE

	<u>Less Than 40</u>		<u>40 or More</u>	
	%	(N)	%	(N)
<u>North Asylum Hill</u>				
1975	24	(55)	15	(31)
1976	22	(44)	18	(30)
1977	31	(139)	22	(85)
<u>Total City</u>				
1975	46	(210)	24	(220)
1976	*		*	
1977	48	(424)	25	(426)

* Data not available for this time period.

Table B44

PERCENT WHO LIKE TO USE PARK NEAR HOME BY RACE

	Black % (N)	White % (N)
<u>North Asylum Hill</u>		
1975	32 (34)	13 (47)
1976	-	16 (44)
1977	30 (94)	24 (118)
<u>Total City</u>		
1975	34 (200)	34 (281)
1976	*	*
1977	38 (275)	37 (462)

* - There is an insufficient number of cases in this category for meaningful results (N<30).

* Data not available for this time period.

Table B45

PERCENT WHO HAVE REGULAR ARRANGEMENT WITH NEIGHBORS TO WATCH ONE
ANOTHER'S HOMES BY AGE

	Less Than 40 %		40 or More %	
		(N)		(N)
<u>North Asylum Hill</u>				
1975	19	(55)	17	(32)
1976	16	(45)	11	(30)
1977	28	(141)	24	(84)
<u>Total City</u>				
1975	31	(210)	32	(220)
1976	*		*	
1977	25	(425)	34	(425)

* Data not available for this time period.

Table B46

PERCENT WHO HAVE REGULAR ARRANGEMENT WITH NEIGHBORS
TO WATCH ONE ANOTHER'S HOMES BY RACE

	Black		White	
	%	(N)	%	(N)
<u>North Asylum Hill</u>				
1975	28	(34)	9	(48)
1976	22	(30)	9	(45)
1977	31	(24)	24	(117)
<u>Total City</u>				
1975	38	(199)	27	(285)
1976	*		*	
1977	31	(294)	28	(464)

* Data not available for this time period.

Table B47

PERCENT WHO PERCEIVE THAT HARTFORD POLICE COME "RIGHT AWAY"
WHEN SOMEONE IN THE NEIGHBORHOOD CALLS FOR HELP BY AGE**

	Less Than 40 %		40 or More %	
	(N)		(N)	
<u>North Asylum Hill</u>				
1975	68	(54)	77	(31)
1976	43	(43)	-	
1977	45	(141)	70	(83)
<u>Total City</u>				
1975	60	(272)	60	(259)
1976	*		*	
1977	53	(417)	61	(414)

** As opposed to "take a while" or "don't know".

- There is an insufficient number of cases within this category to produce meaningful results (N<30).

* Data not available for this time period.

Table B48

PERCENT WHO PERCEIVE HARTFORD POLICE PROTECTION OF PEOPLE
IN THE NEIGHBORHOOD IS "VERY GOOD" OR "GOOD ENOUGH" BY AGE**

	Less Than 40		40 or More	
	%	(N)	%	(N)
<u>North Asylum Hill</u>				
1975	80	(50)	80	(30)
1976	48	(41)	-	-
1977	53	(130)	76	(82)
<u>Total City</u>				
1975	68	(260)	79	(253)
1976	*		*	
1977	63	(403)	80	(328)

** As opposed to "not so good" and "not good at all".

- There is an insufficient number of cases within this category
to produce meaningful results (N<30).

* Data not available for this time period.

Table B49

PERCENT WHO PERCEIVE THAT HARTFORD POLICE TREAT NEIGHBORHOOD
RESIDENTS "VERY WELL" OR "WELL ENOUGH" BY AGE **

		Less Than 40 (N)	%	40 or More (N)	%
<u>North Asylum Hill</u>					
1975		(47)	90	(30)	78
1976		(40)	79	-	-
1977		(120)	54	(74)	100
<u>Total City</u>					
1975		(253)	78	(489)	90
1976		*	*	*	*
1977		(390)	75	(362)	89

** As opposed to "not so well" and "not well at all".

- There is an insufficient number of cases within this category to produce meaningful results (N<30).

* Data not available for this time period.

Table B50

PERCENT WHO FEEL PART OF A NEIGHBORHOOD HERE BY AGE**

		Less Than 40 %	(N)	40 or More %	(N)
<u>North Agylum Hill</u>					
1975		41	(53)	37	(32)
1976		25	(44)	26	(30)
1977		27	(141)	45	(82)
<u>Total City</u>					
1975		41	(274)	50	(262)
1976		*		*	
1977		44	(422)	55	(414)

** As opposed to feeling the neighborhood is "just a place to live."

* Data not available for this time period.

Table B51

PERCENT WHO FEEL PART OF NEIGHBORHOOD HERE BY RACE

	Black		White	
	%	(N)	%	(N)
<u>North Asylum Hill</u>				
1975	42	(33)	34	(47)
1976	34	(30)	15	(44)
1977	23	(93)	42	(115)
<u>Total City</u>				
1975	45	(194)	48	(283)
1976	*		*	
1977	56	(291)	48	(456)

* Data not available for this time period.

Table B52.

PERCENT WHO FEEL NEIGHBORS MOSTLY HELP EACH OTHER BY AGE**

	Less Than 40		40 or More	
	%	(N)	%	(N)
<u>North Asylum Hill</u>				
1975	47	(54)	46	(32)
1976	14	(44)	-	-
1977	33	(136)	40	(82)
<u>Total City</u>				
1975	47	(271)	50	(265)
1976	*		*	
1977	42	(413)	53	(407)

** As opposed to feeling neighbors "mostly go their own ways".

- There is an insufficient number of cases within this category to produce meaningful results (N<30).

* Data not available for this time period.

Table B53

PERCENT WHO FEEL NEIGHBORS MOSTLY-HELP EACH OTHER BY RACE**

	Black		White	
	%	(N)	%	(N)
<u>North Asylum Hill</u>				
1975	54	(33)	38	(48)
1976	-		16	(43)
1977	23	(91)	47	(112)
<u>Total City</u>				
1975	50	(194)	46	(284)
1976	*		*	
1977	48	(284)	45	(447)

** As opposed to feeling neighbors "mostly go their own way".

- There is an insufficient number of cases for meaningful results (N<30).

* Data not available for this time period.

APPENDIX C

RESIDENT SURVEY INTERVIEW SCHEDULE

Following are the questions asked in the 1977 resident survey. The great majority of these questions were asked in the three earlier surveys as well. As mentioned in Appendix A above, the 1975 schedule consisted of a subset of questions asked on 1973 with a few minor changes. Several questions were added in 1976 and 1977; these additions are noted when they occur.

The questions are listed sequentially as they were asked. Omitted question numbers are those assigned to instructions for interviewers, which have not been typed. Response categories for closed-ended items are underlined in the questions.

Cover Interview

18. Now, would you tell me how many people in your household, who are 18 years old or older, have lived at this address for six months or more?

(If any):

19. We would like to conduct our interview with someone in the household who is randomly selected. In order to make this random selection, I need to know, first, how many males, 18 years or older there are in your household. How many are there who have lived here for at least six months?

20. Are there any males under 18 who are married? (If so, how many have lived here for at least six months?)

21. How many females 18 years old or older are there in your household who have lived here for at least six months?

22. Are there any females under 18 who are married? (If so, how many have lived here for at least six months?)

23. Are all these men and women you have mentioned living here at the present time?

24. Is there anyone else over 18 that you haven't mentioned who lives here but who is temporarily away, or someone who isn't a member of the family like a roomer? (If so, how many have lived here for at least six months?)

25. O.K., that's fine. Now according to my selection table with (NUMBER OF ADULTS) total living here in this house we want to interview.

Is (he/she) home now?

(All cover sheet informants):

26. Now I would like to ask you just a couple of questions about where you live. Do you or your family own or rent your home?

(If rents):

27. Does the owner live in the building?

28. In which city or town and state did you live before you moved to this address?

If HARTFORD (Could you give me the number and street where you lived?)

(If household has no eligible R):

30. And what is your background-- is it Oriental, Black, White Spanish or Indian?

31. Where were you born?

33. What country did most of your family come from originally - that is before they came to the United States (or Canada)?

34. I need to know who lives here with you. I don't need names, but only how they are related to you. Let's start with you.

35. How old (was/were) (PERSON) on (his/her/your) last birthday?

36. And (is/are) (PERSON) married, widowed, separated, divorced or never married (SINGLE)?

38. Is there anyone else that you haven't mentioned who lives here but is temporarily away or someone who isn't a member of the family, like a roomer?

Interview Schedule

Neighborhood

- A1. First I'd like to start by asking you about your neighborhood. In general, is it pretty easy for you to tell a stranger from someone who lives in this area, or is it pretty hard to know a stranger when you see one?
- A2. In the past year, do you remember seeing any strangers in your neighborhood whose behavior made you suspicious?
- (If yes):
- A3. Did this happen once or more than once? (About how many times in the past year?)
- A4. Did you do anything, like check on the situation, or call the police, or did you ignore it?
- (A11):
- A5. What do you think your neighbors would do if they saw someone suspicious outside your door - do you think they would probably check on the situation or call the police, or would they probably ignore it?
- A6. In some neighborhoods, people do things together and help each other - in other neighborhoods, people mostly go their own ways. In general, what kind of neighborhood would you say this is, mostly one where people help each other or one where people go their own ways?
- A7. Would you say you really feel a part of a neighborhood here, or do you think of it more as just a place to live?
- A8. In general, in the past year or so do you think this neighborhood has gotten to be a better place to live, a worse place to live, or has it stayed about the same?
- A9. What is the most important way in which it is (better/worse)?
- A10. Five years from now, do you think this neighborhood will be a better place to live than it is now, worse, or about the same as it is now?
- A11. In the past year, have you gone to any meetings of any group concerned with problems in this neighborhood?

(If yes):

A12. About how many meetings like that have you gone to in the past year?

(A11):

A13. Could you tell me the name of any groups you know of (including any you've been talking about) that are working on problems in this neighborhood? (Any others?)

(Asylum Hill only - 1977 only):

A15. Have you ever heard of:

a) Sigourney Square Civic Association (SSCA)?

b) Western Hill organization (WHO)?

c) Central Asylum Hill Association (CAHA)?

d) Police Advisory Committee (PAC)?

(For each group known):

A16.

c) As far as you know, what is the main purpose of (GROUP)?

d) Overall, how much good do you think (GROUP) has done - a lot, some or not very much?

e) Is your home in the area in which (GROUP) works?

(If yes):

f) In the past year, have you gone to any meetings or activities sponsored by (GROUP)?

g) How many?

h) Are you a member of (GROUP)?

i) What was your main reason for (joining/not joining) (GROUP)?

(If no):

k) How is that?

(Outside Asylum Hill only):

A17. How much good (have these/has this) group(s) done - a lot, some, or not very much?

(A11):

A18. How many people, both adults and children, would you say are usually on the street on front of your home during the daytime - a lot, some, a few or almost none?

A19. How about after dark, how many people would you say are usually on the street in front of your house - a lot, some, a few, or almost none?

A20. During the day do most of the people you see on the streets live around here, about half and half, or do most of them come from outside the neighborhood?

A21. When you think about cars, motorcycles, and buses, that pass in front of your home during the daytime, would you describe the traffic as very busy, busy, moderate, light or very light?

A22. And at night, how would you describe the traffic in front of your home - very busy, busy, moderate, light, or very light?

A23. How many days during the past week were you outside your house or apartment for some period of time - sitting on the porch or steps, working in the yard, or something like that?

A24. Is there a public park near where you live?

A25. Is it a place you like to go to or walk through, or not?

(If no):

A26. Why is that?

(A11):

A27. How often would you say you walk to some place in this neighborhood during the day - would you say almost every day, a few times a week, once a week, less often, or never?

A28. And after dark, about how often do you walk some place in this neighborhood - almost every night, a few times a week, once a week, less often, or never?

(If ever):

A29. And after dark, about how often do you walk some place in this neighborhood - almost every night, a few times a week, once a week, less often, or never?

(A11):

A30. When you go out at night in your neighborhood, do you often drive or get someone to drive you rather than walk?

A31. Do you usually carry anything for protection when you walk in your neighborhood - such as a weapon, a whistle, or tear gas?

A32. During an ordinary week about how many days are there when no one at all is home for some time during the daytime?

(If any):

A33. About how many hours a day is that (that no one is home)?

(A11):

A34. And during an ordinary week, about how many evenings are there when no one at all is home for periods after dark?

A35. Do you have special locks on your doors? (All of them or just some?).

A36. Have you had your valuables engraved with your name or some identification in case they are stolen?

A37. Have you and any of your neighbors ever made an arrangement to watch one another's houses when you are not at home?

(If yes):

A38. Do you do that all the time, or just on special occasions, such as vacations?

(A11):

A39. Do you have anything else to protect your home from being broken into?

A40. How many of the people living in this area do you think always lock their doors during the daytime - all of them, most of them, some of them, a few of them, or almost none?

- A41. How many of the people living in this area do you think would report a crime to the police, such as a burglary, if they saw it happening to someone they did not know - all of them, most of them, some of them, a few of them or almost none?
- A42. How many people living in this area do you think would report a crime to the police, such as a burglary, if they saw it happening to someone they did not know - all of them, most of them, some of them, a few of them, or almost none?
- A43. How many people living in this area do you think would be willing to help with a group that was concerned with preventing crime in this area - all of them, most of them, some of them, a few of them, or almost none?
- A44. When neighbors are concerned and try to keep crime from happening to others - how much difference do you think it makes in the amount of crime in a neighborhood - a lot of difference, some difference, or not much difference at all?
- A45. How much do you think people in your area are concerned with preventing crime from happening to others living here - a great deal, some, or not much?
- A46. How do you think this has changed in the past year- are people in your area more concerned with preventing crime, less concerned or about the same as they were a year ago?

(Asylum Hill only):

- A48. In the past year, some streets in Asylum Hill have been closed or narrowed, some have been made one-way. Do you know about these street changes or not? (1976 - 1977 only).

(If yes):

- A49. Overall, do you think these changes are a good idea, not a good idea, or are you not sure? (1976 - 1977 only)
- A50. In what ways, if any, have these changes improved the neighborhood? (1977 only)
- A51. In what ways, if any, have these changes made the neighborhood worse? (1977 only)

(A11 Asylum Hill):

A52. Thinking again about the people, adults and children that you see on the street in front of your house during the day -- would you say there are more people on the street than a year ago, fewer people, or is it about the same? (1977 only)

A53. How about your neighbors, do you see more of your neighbors out on your street during the day than you did a year ago, or fewer of them, or that about the same? (1977 only)

A54. And how about the cars, motorcycles, and buses that pass in front of your home during the day -- would you say the traffic is heavier than it was a year ago, lighter, or about the same? (1977 only)

Police

(A11):

B1. Now I'd like to talk about the Hartford Police Department. About how often do you see a Hartford policeman in this neighborhood on foot - several times a day, almost every day, a few times a week, once a week, a few times a month, or almost never?

B2. And about how often do you see Hartford policemen patrolling the streets in a car or on a motor scooter - several times a day, almost every day, several times a week, once a week, a few times a month, or almost never?

B3. When someone in this neighborhood calls the Hartford Police Department for help, do they usually come right away, or do they take quite a while to come?

B4. Have you had occasion to call the Hartford Police Department for help or about a crime in the last year or so?

(If yes):

B5. What was it about?

B6. How satisfied were you with the help you received from the police - very satisfied, somewhat satisfied, not too satisfied, or not at all satisfied?

(A11):

B7. If you came home and found signs that someone had tried to break in, but nothing was stolen, would you report it to the police?

B8. Why is that/Why not?

- B9. If you were robbed on the street and had some money stolen would you report it to the police?
- B10. Why is that/Why not?
- B11. Overall, how would you rate the job the Hartford Police Department does protecting people in this neighborhood - very good, good enough, not as good, or not good at all?
- B12. And how would you rate the way the Hartford police usually treat people in this neighborhood - very well, well enough, not so well, or not well at all?
- B13. If 0 stands for very poorly and 10 stands for extremely well. - in general, how would you rate the way white people are treated by Hartford police?
- B14. How about blacks - what number would you give for the way they are usually treated by Hartford police?
- B15. And how about Spanish speaking people, which number would you give for the way the Hartford police treat them in general?
- B16. Do you think police services in this neighborhood have gotten better, worse, or stayed the same, over the past year? (1976 - 1977 only)

(Asylum Hill only):

- B18. As far as you know, have there been any changes in the police service or the way police are organized in this neighborhood in the last year or two? (1977 only)

(If yes):

- B19. Tell me about that. (1977 only)

Fear

(All):

- C1. In the daytime, how worried are you about being held up on the street, threatened, beaten up or anything of that sort in your neighborhood? Would you say you are very worried, somewhat worried, just a little worried, or not at all worried?

C2. And how about at night, how worried are you about that sort of thing in your neighborhood - very worried, somewhat worried, just a little worried, or not at all worried?

C3. And, how worried are you about your home being broken into or entered illegally in the daytime when no one is home? Would you say you are very worried, somewhat worried, just a little worried, or not at all worried?

C4. And how about at night, how worried are you about your home being broken into then when you're not at home - very worried, somewhat worried, just a little worried, or not at all worried?

C5. Think of a scale from 0 to 10. Zero stands for no possibility at all and ten stands for extremely likely. During the course of a year, how likely is it that _____?

- a) someone would break into your (house/apartment) when no one is home
- b) your purse/wallet would be snatched in your neighborhood
- c) someone would take something from you on the street by force or threat in your neighborhood
- d) someone would beat you up or hurt you on the street in your neighborhood

C6. During the day - how safe do you feel or would you feel being out along in your neighborhood - very safe, reasonably safe, somewhat unsafe, or very unsafe?

C7. How about after dark - how safe do you feel or would you feel being out alone in your neighborhood - very safe, reasonably safe, somewhat unsafe, or very unsafe?

C8. I am going to read you a list of crime-related problems that exist in some areas. For each, I want you to tell me whether it is a big problem, some problem, or almost no problem in your neighborhood?

- a) People selling illegal drugs
- b) People using illegal drugs
- c) Groups of teen-agers around in the streets or parks
- d) Groups of men in the streets or parks
- e) Drunken men
- f) Prostitution

(If any rated as big problem or some problem):

C10. Have you or any of your neighbors tried to do anything about (this/these) problem(s)?

C11. What have you done?

(A11):

C12. How about _____? Is that a big problem, some problem, or almost no problem?

- a) Stealing cars
- b) Burglary - breaking into people's homes
- c) Robbing people on the street
- d) Holding up and robbing small stores or businesses
- e) People being beaten up or hurt on the streets
- f) Crimes against the elderly
- g) Crimes committed by school-aged youths

C13. Overall, what do you think is the most important crime problem in your neighborhood?

C14. Over the past year, would you say that crime in this neighborhood has gone up, gone down, or stayed about the same?

Victimization

We have some specific questions to ask you about crimes that may have happened to you or a member of your household during the past year within the Hartford city limits.

- D1. a) During the past year, since a year ago (MONTH), did anyone enter your (house/apartment), (garage, or any other building on your property), who didn't have a right to be there, to steal something?
- b) (Other than that) Did you find any sign that someone tried to break in but did not succeed such as a forced window or lock, or jimmied door?
- c) Did anyone steal something who had a right to be in your house, such as a neighbor, repairman, or delivery man?
- d) Did you (or any member of your household) have your purse or any of its contents snatched without force or the threat of force?

- e) Did anyone take or try to take something from you (or any member of your household), by using force or the threat of force?
- f) To the best of your knowledge, was anything stolen from your mailbox during the past year?
- g) To the best of your knowledge, were there any other times when someone broke or tried to break into your mailbox in the past year?
- h) Did anyone steal your car or use it without your permission?
- i) (Other than that) Did you find any signs that someone tried to steal your car or use it without permission?
- j) Did you (or any member of your household) have any other property stolen that did not involve breaking into your home or using force or the threat of force, such as something you left outside of your home, something taken from your car or part of your car?
- k) (Other than the things you have mentioned) During the past year, were you or any member of your household threatened with any weapon or tool, or beaten up, or attacked?
- l) (Other than that) During the past year, did anyone attempt to forcibly rape, molest, or sexually abuse you (or anyone in the household)?
- m) Did anyone purposely destroy or damage anything belonging to you including your (house/apartment) or car, such as breaking your windows or lights, slashing the tires on your car, marking the doors of your (house/apartment) or burning something? We are interested only in your property or property you are responsible for. This does not include street lights or common territory, such as the halls of an apartment building.

(The following set of probes was asked for each of the above when a crime had occurred):

- a) (IF SOMETHING WAS STOLEN) Was it worth \$50 or more?
- b) What month and year did _____ happen?
- c) Did you or anyone else inform the police?
(If yes):
- d) Did (you/PERSON) or the policeman fill out a formal report?
- e) Did you ever again hear from the police about this?

D2. Now I am going to read some statements. For each, I want you to tell me whether you agree or disagree.

- a) People in your neighborhood have a lot of say in what police do.
- b) The police don't really understand the people in your neighborhood.
- c) The police in your neighborhood really try to do what is best for the people that live there.
- d) Police don't spend their time on the problems the people in your neighborhood really care about.
- e) When there is a crime problem, it is basically the fault of the citizen.
- f) Reporting minor crimes to police is a waste of time.
- g) No matter what police or citizens do, crime in your neighborhood will keep going up.
- h) If police got more help and cooperation from citizens, they could reduce crime in your neighborhood.

DEMOGRAPHICS

E1. Finally, we have just a few questions for background information.

How much education have you had? (IF "HIGH SCHOOL" OR "COLLEGE":
Did you graduate?)

E2. How long have you been living in this (house/apartment)?

E3. And what is your background -- is it Oriental, Black, White, Spanish
or American Indian?

(If not American Indian):

E4. Where were you born?

(If born in U.S. or Canada and not black):

E6. What country did most of your family come from originally - that is
before they came to the United States (or Canada)

(All):

E7. Are you (or anyone 18 or older living with you) out of a job and looking
for work?

E8. Who is that? (Anyone else?)

E9. a) I need to know who lives here with you. I don't need names, but
only how they are related to you. Let's start with you.

b) How old (was/were) (PERSON) on (his/her/your) last birthday?

c) And (is/are) (PERSON) married, widowed, separated, divorced or
never married (SINGLE)?

e) Is there anyone else that you haven't mentioned who lives here but
is temporarily away or someone who isn't a member of the family,
like a roomer?

E10. I would like you to estimate the total combined income of your
family for the past 12 months - (that is, yours, your (ALL ADULTS'
etc.) - before deductions for taxes. Please include income from all
sources - that is, wages, salaries, social security, or retirement
benefits, help from relatives, rent from property and so forth.
Would you say it is under \$5,000, \$5,000 to \$10,000, \$10,000 to \$15,000,
or over \$15,000 for the year?

(IF LESS THAN \$5,000) Is it more or less than \$3,000?

(IF \$5,000 TO \$10,000) Is it more or less than \$7,000?

(If eligible for Social Security):

E12. Do you receive any income from Social Security? (1977 only)

E13. How do you get your (Social Security) checks.... that is, do you have them mailed to you at home, have them deposited directly into the bank, or what? (1977 only)

E14. Finally, we have talked a lot about crime and fear and police. I would like you to tell me in your own words about how you see crime and fear in your neighborhood, and how it effects you personally. (Anything else?) (1977 only)

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**Reducing
Residential Crime and Fear:
The Hartford
Neighborhood Crime Prevention
Program**

Executive Summary

by

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Robert Wiles

1
February 1980

U.S. Department of Justice
Law Enforcement Assistance Administration
**National Institute of
Law Enforcement and Criminal Justice**



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PROJECT DOCUMENTS

The following documents have been produced by the Hartford project:

REDUCING CRIME AND FEAR: THE HARTFORD NEIGHBORHOOD CRIME PREVENTION PROGRAM: TECHNICAL RESEARCH REPORT.

This is the principal document, providing the most thorough and technical description of the research. Sections of the report present detailed discussions of (1) the background, conceptual framework, and objectives of the program; (2) the data sources, methods, and findings utilized in identifying and analyzing target area crime problems; (3) the design of a comprehensive program for reducing target area crime, including strategy components for the physical environment, the police, and the community residents; (4) the implementation and monitoring of program strategies; (5) the evaluation methodology and findings for assessing program impact on target area crime and fear; and (6) the conclusions and implications of the Hartford project experience for crime control program design and implementation in other urban residential settings. Finally, extensive data tables and research instruments are presented in appendices to the report. This technical document is of primary interest to the research and academic communities.

REDUCING CRIME AND FEAR: THE HARTFORD NEIGHBORHOOD CRIME PREVENTION PROGRAM: AN EXECUTIVE SUMMARY REPORT.

This document is a summary of the technical research report, described above, presenting an overview of the major project concepts, objectives, findings, and implications. It necessarily omits much of the technical detail of the research and is of interest to a broader, non-technical audience of urban planners, program implementers, and criminal justice personnel.

The Appendix of the Executive Summary consists of two related working papers which describe problems and special issues relating to the project. The first, entitled "Implementation of the Hartford Neighborhood Crime Prevention Program," describes the special problems encountered in implementing the program and suggests procedures for implementing future programs. The second, entitled "Evaluation of the Hartford Neighborhood Crime Prevention Program," addresses some of the special problems and issues encountered in the research and should be of primary interest to program evaluators and other researchers.

A limited number of copies of both published reports are available from the National Criminal Justice Reference Service, P. O. Box 6000, Rockville, Maryland 20850. Copies are also available for sale from the Government Printing Office in Washington, D. C.

ABSTRACT

The Hartford project was an experimental program intended to reduce residential burglary and street robbery/pursesnatch, and the fear of those crimes in an urban residential neighborhood. The program combined changes in the physical characteristics of the neighborhood with police and resident activities in an integrated effort to increase resident control of their neighborhood and to reduce criminal opportunities.

The neighborhood, Asylum Hill, is located near the retail and commercial center of Hartford. In 1973, when the program was initially undertaken, its population consisted primarily of single, working individuals, young and old, with a high rate of transiency and an increasing number of minority residents. Most of the population resided in low-rise apartment houses or two- and three-family houses. Once a choice residential neighborhood, the area was beginning to show signs of incipient decline.

Analysis of the crime in the area was undertaken by a team of specialists in urban design, crime and law enforcement analysis, and survey research. The team's task involved two elements: first, to develop an understanding of the ways in which residents, potential offenders, police, and the physical environment interacted to create criminal opportunities; second, to design inexpensive strategies that could be quickly implemented to interrupt a pattern of rising crime.

The analysis showed that a number of features of the physical environment were working to destroy the residential character of the neighborhood. Vehicular and pedestrian traffic passing through the area dominated the streets and depersonalized them. The streets belonged more to outsiders than to the residents, creating an ideal environment for potential offenders.

In 1974 the team designed a three-part program intended to respond to those problems in order to reduce crime in Asylum Hill and its attendant fear. This program, which was implemented in 1975 and 1976, included:

- a) closing entrances to some residential streets and narrowing others at their intersections with arterial streets in order to reduce outside traffic on the streets and thus enhance the residential character of the area;
- b) instituting a neighborhood team police unit with strong relationships with the residents;
- c) creating community organizations and encouraging them to work with the police and to initiate resident efforts to improve the neighborhood and reduce criminal opportunities.

A careful evaluation of the program was carried out after the program had been in operation a year. Findings indicated a substantial reduction in burglary and fear of burglary while a pattern of increasing robbery/pursesnatch was halted and may have undergone a reduction. All of the program components had a role to play and contributed to the positive results of the program. However, among the various changes observed, increased resident use of and efforts to control the neighborhood appeared to be the most important reasons for the initial success of the program in reducing crime and fear. The physical changes appeared to be essential to achieving those results.

FOREWORD

This report presents the results of an experimental crime prevention program in Hartford, Connecticut, sponsored by the National Institute of Law Enforcement and Criminal Justice, and designed to reduce residential burglary, street robbery, and the concomitant fear of these offenses in a neighborhood showing signs of increasing crime accompanied by physical and social deterioration:

The program was based on a new "environmental" approach to crime prevention: a comprehensive view addressing not only the relationship among citizens, police, and offenders, but also the effect of the physical environment on their attitudes and behavior. Prior to Hartford, the National Institute had funded a number of studies which had included physical design concepts in crime prevention programming. However, the Hartford project and its evaluation was the first attempt at a comprehensive test of this environmental approach to crime control.

As a pioneering effort in the integration of urban design and crime prevention concepts, the Hartford project expanded the field of knowledge about the role of the physical environment in criminal opportunity reduction. Many of the theoretical advances that were made in the project have now been widely adopted in the field of environmental crime prevention.

In addition to its theoretical contributions, the project generated considerable practical knowledge about the implementation of an integrated crime prevention program. As an example of the successful application of theoretical principles to an existing physical setting, it provides a realistic test of the practical utility of its underlying concepts and should thus represent a valuable model to urban planners and law enforcement agencies in other communities.

Finally, the Hartford project has important implications for evaluation. The data collected before, during, and after the experiment were extensive and methodologically sophisticated. As a result, the evaluation is an especially rigorous, thorough, and scientifically sound assessment of a comprehensive crime control project, providing an excellent model for future program evaluators.

Although only the short-term (one year) evaluation has been completed, the early findings offer encouraging preliminary evidence in support of the major project assumption: that changes made in the physical environment of a neighborhood can produce changes in resident behavior and attitudes which make it more difficult for crimes to occur unobserved and unreported. A substantial reduction in residential burglary and fear was observed in the experimental area and, while less conclusive, there appears to have been an effect on street robbery and fear as well.

It must be remembered, however, that these findings reflect only short-term program impact and thus provide only tentative indications of potential program success. More definitive conclusions will be possible only after a re-evaluation of the program -- currently in its initial stages -- has measured the long-term effects on crime and fear in the target area.

Lois Mock
Fred Heinzelmann
Community Crime Prevention
Program
National Institute of Law
Enforcement and Criminal
Justice

ACKNOWLEDGMENTS

The planning and the evaluation of the Hartford Neighborhood Crime Prevention Program was funded by grant numbers 73-NI-99-0044-G and 75-NI-99-0026 from the National Institute of Law Enforcement and Criminal Justice.

The program lasted five years, went through many phases, and involved numerous organizations and individuals whose work was essential. Because of the number of people contributing to this program, it is inevitable that some will not receive their due acknowledgment. However, we will attempt to identify as many of the most critical people as possible.

As grantee, the Hartford Institute of Criminal and Social Justice had the responsibility for coordinating all aspects of the program. However, its most important role involved working within the community to facilitate and coordinate the implementation of the program.

Brian L. Hollander, then President of the Hartford Institute, was personally involved in all phases of the project. Other Institute staff members involved in the project include Francis X. Hartmann, who took considerable responsibility for the Institute's role in monitoring activities in Hartford; Robert Wiles and Richard Pearson, who had primary responsibility for working with the neighborhood groups and monitoring their activities; Megan O'Neill and Louella Mayo, who worked with the community organizations to coordinate public safety activities; Rudolph Brooks, who worked closely with the Hartford Police Department and was responsible for collecting police record data; Rinda Brown, who played an important role in producing the written products from the Hartford Institute; and Diane Marshall, who typed this report and who had primary clerical responsibility for the written products from the Hartford Institute.

The Center for Survey Research (formerly the Survey Research Program), a facility of the University of Massachusetts/Boston and the Joint Center for Urban Studies of M.I.T. and Harvard University, had overall responsibility for evaluation of the program. Floyd J. Fowler, Director of the Center, had primary responsibility for the Center's role in the program. Mary Ellen McCalla and Thomas W. Mangione

X

worked closely with him on design and analytic tasks. Ellen Rothman, who served as a research assistant on the project during the first two years; Barbara Cardillo, who served in the same capacity in the final year; and Alice Fehlhaber, who served as field supervisor during all four waves of survey interviewing deserve special mention for their contributions.

Richard A. Gardiner and Associates, a land planning and urban design firm, was responsible for the physical design component of the program. Staff members from RAGA had specific responsibility for analysis of the physical environment and its contribution to crime, development of a general physical design plan to reduce criminal opportunities, design of specific site plans for the physical changes, and development of considerable conceptual and theoretical work which has been used not only in the Hartford project, but also in more recent efforts throughout the country. Besides Richard Gardiner himself, Dr. Sanford Low, cultural anthropologist; Allen Moore, architect; and Bruce Tsuchida and Tom Kirvan, landscape architects, contributed most to the physical design component of the project.

Initially, as a research associate at Urban Systems Research and Engineering and later as a faculty member at John Jay College (CUNY), Thomas A. Reppetto played a central role in the analysis of the crime problem and in the early draft of the crime control model that was eventually tested. His previous research in Boston and his personal efforts played a major role in the formation and inception of this project.

James M. Tien of Public Systems Evaluation, Inc., took responsibility for monitoring the police component of the project during the evaluation year, and also made numerous contributions to early drafts of the project reports.

In the City of Hartford itself, many persons contributed to the implementation and evaluation of this project. The Hartford Police Department deserves substantial credit. Under the leadership of Chief Hugo Masini, the Department gave full cooperation to the implementation of the police component. The Department also permitted on-site monitoring of police operations, provided record data, and facilitated the distribution and collection of questionnaires from members of the police teams. Of the many police officers who were

helpful, we particularly want to mention Neil Sullivan, currently Deputy Chief, who was the original Commander of the experimental district and who contributed to the successful implementation of the police effort in innumerable ways. Lieutenants LeRoy Bangham and Daniel Ward, who headed the two experimental teams, also deserve special mention.

Politically, the entire project would have been impossible without the support of the Hartford City Council and Edward M. Curtin, then City Manager. These people were willing to take a chance on an unproven program despite vocal opposition in the hopes that something important could be learned about how to reduce urban crime. Also, Jonathan Colman, Director of the Planning Department, spent considerable time with the architects working out the details of the physical changes, and John Sulik, then Director of Public Works, was responsible for the overall coordination of the City's role in their construction. Robert Messier of the Department of Public Works deserves special mention for his role as construction site supervisor.

Thanks are owed to some 3,000 residents of Hartford who cooperated by giving their time to the various surveys which were an essential part of this project. Thanks are also due the more than 200 interviewers who carried out these surveys.

Special mention should be made of the contribution of Lois Mock, the Project Monitor at NILECJ, and Fred Heinzelmann, Director of the Community Crime Prevention Program, which funded the evaluation of the project. This project took much longer than anyone had envisioned at the start, and their support of the project through the various delays kept it from foundering. They were intimately involved in all phases of the project, particularly its evaluation. Richard Rau of NILECJ, the original monitor for the project, also should be acknowledged for his role in the initial development of the project.

The document, which was prepared by the staff of the Hartford Institute, is based on early versions of the Technical Research Report prepared by the Center for Survey Research. This report is dependent on the Center and other contractors for analytic conclusions and other conceptual work; however, the Hartford Institute had final responsibility for putting together this summary document.

INTRODUCTION

A major premise underlying the Hartford Neighborhood Crime Prevention Program was that there is a direct correlation between the design and functioning of the residential physical environment and stranger-to-stranger crimes of opportunity such as burglary and street robbery.¹ This premise holds that the physical environment and the way it is used can create conditions which facilitate or hinder crime opportunities. Therefore, the study of the environment and its use by residents, police, and others is essential to a full understanding of opportunity creation and reduction. The Hartford project was the first attempt to implement and evaluate this environmental approach to crime prevention.

A second major premise upon which the Hartford program is based is that a program must be crime-specific and site-specific, both in problem analysis and solution design, in order to produce successful results. Different kinds of crime are caused by various factors which differ from location to location. Although a crime- and site-specific program design approach may trigger conditions which lead to a total reduction in crime, attempts to effect widespread crime reduction of a variety of unrelated types of crime in one or more locations often result in dispersion of effort and minimal accomplishment.

A third major premise was that a comprehensive set of integrated solutions would produce a better result than any single solution. An approach that integrated solutions focusing on the physical environment, police and residents was believed more likely to succeed in reducing crime opportunities than an approach that omitted any of these three elements. While the overall success of the integrated program would depend on the success of each individual component, it was intended that the elements would reinforce each other through the development of a set of mutually supportive relationships among the physical environment, police, and residents to achieve a maximum impact on crime. It was expected that a synergistic effect would be produced in which the combination of components would result in the leveraging of each component to an effectiveness beyond its individual capacity.

¹ The use of the term "robbery" throughout this document is intended to include the FBI index crime of pursesnatch as well. "Burglary" refers to residential burglary only.

Given this conceptual background, the Hartford project was designed to test the following hypotheses:

1. The crime rate in a residential neighborhood is a product of the linkage between offender motivation and the opportunities provided by the residents, users, and environmental features of that neighborhood.
2. The crime rate for a specific offense can be reduced by lessening the opportunities for that crime to occur.
3. Opportunities can be reduced by:
 - a. Altering the physical aspects of buildings and streets to increase surveillance capabilities and lessen target/victim vulnerability, to increase the neighborhood's attractiveness to residents, and to decrease its fear-producing features;
 - b. Increasing citizen concerns about and involvement in crime prevention and the neighborhood in general; and
 - c. Utilizing the police to support the above.
4. Opportunity-reducing activities will lead not only to a reduction in the crime rate but also to a reduction in fear of crime. The reduced crime and fear will mutually reinforce each other, leading to still further reductions in both.

In 1973 an interdisciplinary team of specialists began an assessment of the nature of crime and the contributing factors in two residential areas of Hartford. This team included specialists in urban design and land use planning, police operations and criminal justice issues, research and evaluation methodology, and implementation of public policy change. Combining data from police incident reports; an extensive questionnaire survey of residents; physical site and land use analyses; and interviews with offenders, community leaders and police officials, the team assembled a composite picture of crime and fear in the target areas. The intention was to determine the extent and nature of the crime and fear problems in these neighborhoods in order to identify the factors facilitating crime and fear.

Residential burglary and street robbery/pursesnatch were chosen to be the target offenses. Burglary is among the most common serious property crimes, while robbery and pursesnatch are the most common serious crimes against persons. Both types of crimes are usually "stranger-to-stranger" in which the victim and offender do not know each other, and both present a threat to individual security. Because burglary involves breaking into the victim's home and thus is personally threatening (an element of a crime against the person), it is more fear producing than other larceny crimes such as automobile theft.

Hartford was chosen as the site for this project for three reasons. First, Hartford had high crime neighborhoods that were typical of urban neighborhoods nationwide, and thus met an essential criterion for testing a demonstration project which could be replicated in cities throughout the nation. Second, the Hartford Institute of Criminal and Social Justice provided an ideal organization to carry out such an experiment. As a private organization outside city government, with strong working relationships with city officials, the police department, and the business community, it provided a resource for successfully implementing a complex demonstration program. Third, the project required independent funding for the implementation of the proposed crime control program, including any physical design changes required. NILECJ could fund only the planning and evaluation of the experiment. In Hartford there was an expressed willingness on the part of private and public interests to make capital investments in an existing neighborhood, if a feasible and convincing program could be developed.

The two neighborhoods of Hartford chosen for initial analysis were Clay Hill/South Arsenal and Asylum Hill. These two neighborhoods were chosen because they were representative of other urban neighborhoods nationwide which were experiencing rises in crime and fear rates and which might benefit from this type of anti-crime program. Clay Hill/South Arsenal was representative of high density, inner city neighborhoods and experienced problems commonly found in those neighborhoods; Asylum Hill was representative of older urban residential neighborhoods just on the verge of decline.

Located adjacent to Hartford's central business district, Clay Hill/South Arsenal in 1973 was primarily a large ghetto area. It suffered the myriad problems typically found in a seriously declining neighborhood, including deteriorating housing, high unemployment, and poor resident/police relationships. Its predominantly black and Puerto Rican populations lived in older public and private low-rise family housing. Clay Hill/South Arsenal had a high robbery rate and the highest residential burglary rate in Hartford.

Asylum Hill is a residential area near the retail and commercial centers in Hartford. In the early 1970's Asylum Hill was inhabited primarily by single, working individuals, young and old, with a high rate of transiency. The population was mostly white but with an increasing number of minority residents. By 1973, this once attractive area, consisting primarily of low-rise, multi-unit buildings and one- to three-unit wood frame structures, was beginning to show the characteristics of a deteriorating urban neighborhood. Landlords were reluctant to maintain the housing stock. Long-time residents were leaving. Remaining residents were avoiding public places such as an area park and public streets. Major factors in this incipient decline were thought to be rising rates of residential burglary and street robbery (Asylum Hill had a higher than average robbery rate) and the fear engendered by those crimes.

The team soon concluded that it could not develop an environmental program for the Clay Hill/South Arsenal area. Because the neighborhood was greatly deteriorated, the cost of physical changes that would make even a modest difference was prohibitive, and both residents and community leaders felt there were more urgent renovation needs in the area than those addressing crime. There was also considerable hostility in this neighborhood to the concept of attempting to solve crime problems through environmental changes, since residents felt that the improvement of police attitudes and operations in the area was of greater importance. ²

A cursory examination of Asylum Hill showed that physical deterioration and crime rates were greater in the north section, North Asylum Hill, than in the south section, South Asylum Hill. The North Asylum Hill neighborhood was large enough and had enough crime to provide the research opportunities needed for such a project. Yet it was small enough to accommodate a manageable project. It was bounded by census lines, which aided in data collection, in monitoring, and in manageability. It was experiencing serious crime and was located in proximity to other sections which exported considerable crime, not only to North Asylum Hill but to downtown and other sections as well. The neighborhood's central location and the variety of housing types representative of other sections of the city rendered it an ideal area in which to

² Although the full program as originally planned was not carried out in Clay Hill/South Arsenal, a partial program was implemented involving improved policing and increased citizen participation which paralleled those efforts in Asylum Hill.

test a project which would have transferability to other areas of the city. It was also representative of older, urban residential neighborhoods nationwide, and as such provided an ideal opportunity to test a project of nationwide significance. Furthermore, the business community had already initiated a planning process for large-scale physical improvements in North Asylum Hill. The team concluded that the experiment as conceived with the National Institute could be tried in North Asylum Hill.

The entire crime prevention program occurred in four primary stages. The first stage, which began in July, 1973, and lasted six months, consisted of data collection and analysis for the purpose of defining the problems and developing solutions. The second stage, which encompassed a second six months, was devoted to designing the program.

The implementation stage, which began in autumn of 1974, involved presenting the proposed program to the community for their review and recommendations, and putting the final program as accepted into operation. The program as implemented consisted of a three-element approach to reducing criminal opportunities: (1) changing the physical environment, (2) reorganizing the police, and (3) increasing the involvement of community residents. Police reorganization and community organizing efforts began early in 1975. However, proposed changes in the physical environment immediately became embroiled in controversy during the presentation phase, and the changes were not actually constructed until the summer of 1976.

The final stage, evaluation, lasted from July, 1976, through June, 1977. The following sections of this document discuss all stages of the project.

SCHEDULE OF EVENTS OVERVIEW

September
1973
initial
residential
survey

May-June 1975
survey update,
pedestrian and
traffic data

May-June 1976
survey update,
Asylum Hill only;
pedestrian and
traffic data

May-June 1977
survey update,
pedestrian and
traffic data

Spring 1975
police
questionnaire

May 1977
police
questionnaire

/// EVALUATION PERIOD ///

1974

1975

1976

1977

July 1, 1973
project begun

March 1974
basic plan
developed

September 1974
meetings with
community groups
begun

June 1976
street
closings
begun

November 1976
street closings
complete

June 30, 1977
evaluation
period
over

^a NOTE: Crime rates took the entire year -- July 1976 - June 1977 -- as the evaluation period. However, most measures from the surveys and observations essentially measured key variables -- fear, use of streets, etc. -- as of June 1977.

DATA COLLECTION AND ANALYSIS

Data Collection

Various types of information were needed to develop a complete picture of crime in North Asylum Hill; to identify the ways in which the physical environment, offenders, police operations, and residents' behavior contributed to crime opportunities; and to examine resident fear and its relationship to crime and other social and physical conditions of the area.

To obtain this information, five major data collection techniques were utilized. First, in order to determine the features and condition of the physical environment and the ways this environment was being used, urban designers conducted physical site and land use surveys in the area. Second, a random sample survey of residents was conducted in the target area and in the rest of the City in order to obtain up-to-date socio-demographic data; to gather information about the community's experiences, fears, perceptions, and behavior with respect to crime-related issues; and to obtain victimization information. The rest of the City was broken down geographically with some areas serving as control areas for evaluation purposes. Third, special in-depth interviews were conducted with local businessmen, realtors, and other community leaders to supplement the resident surveys. Fourth, interviews with police personnel were conducted to collect information on police operations, attitudes, and relationships to community residents. Finally, to collect information on reported crime itself, (e.g., type, frequency, offenders, location) police incident reports were examined in detail, supplemented by interviews with forty convicted robbers.

Problem Analysis

The analysis focused on the ways in which the physical environment, police, and area residents contributed to opportunities for residential burglary and street robbery, and assessed the current and potential roles of each in opportunity reduction. Each set of data was initially examined individually by the team members responsible for its collection and then collectively by all project team members. Thus each team member was able to bring from his area of specialization insights into the problems, causes, and possible solutions. During their collective review of the data, the team attempted to identify those areas where there was agreement concerning the data's implications and those areas where there was disagreement. When there was disagreement, the team attempted either to collect additional data or to further analyze the data at hand

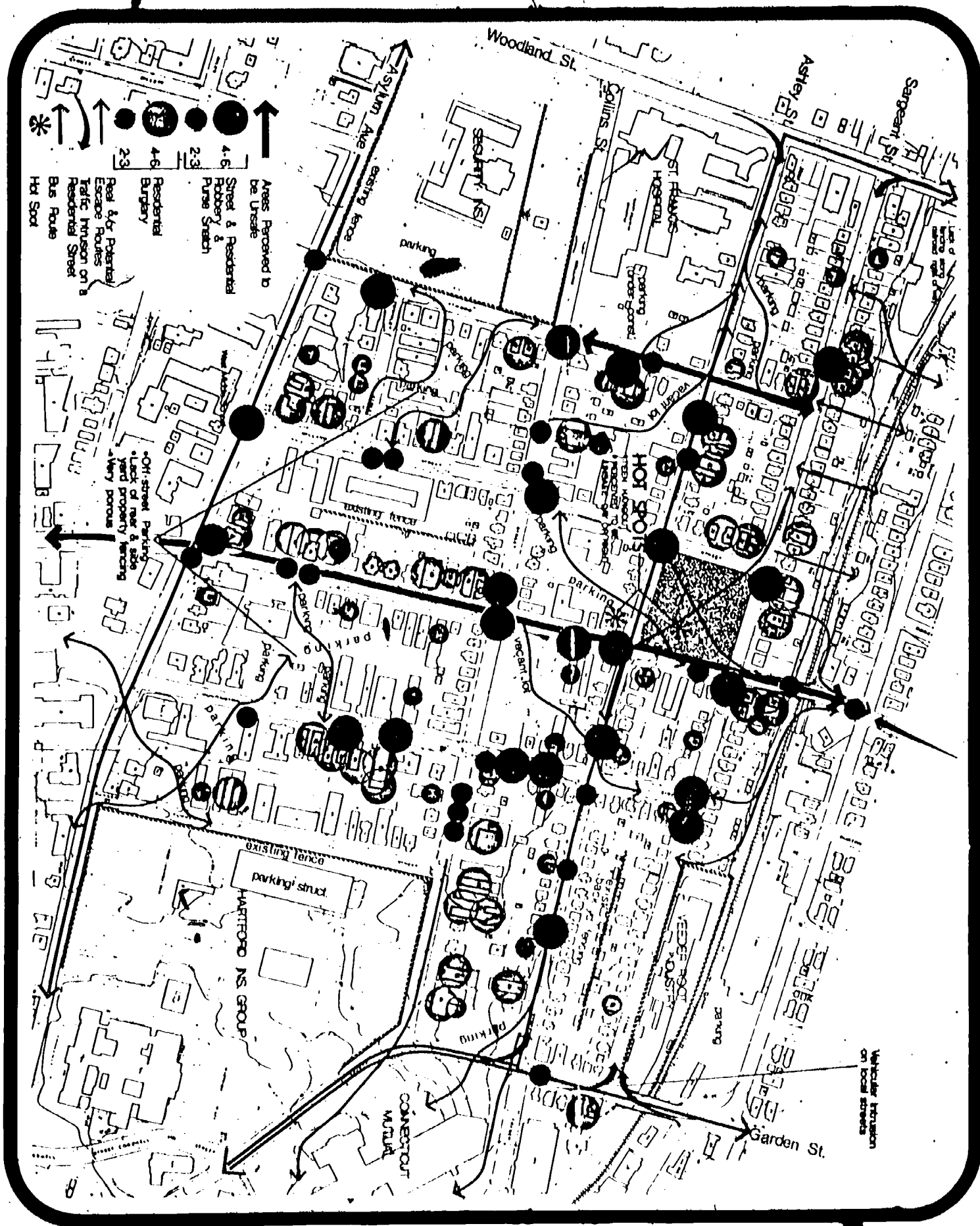
in order to come to an agreement as to cause and effect of crime and fear in the neighborhood. In this way they were able to correlate the crime and fear data in terms of the overall functioning of the neighborhood. The following conclusions were drawn from the data.

The functioning of the residential area within North Asylum Hill was severely impaired by the large amount of non-resident vehicular and pedestrian traffic that passed through each day. This factor, coupled with the presence of large, open parking areas for the employees of large, commercial complexes in the area, created an environment where offenders could comfortably enter and wander about the residents' streets and private yards, find hiding places, commit burglaries and robberies, and escape, all with relative ease. (See Map I, "North Asylum Hill Community Area Problem Map", page 9.)

The Hartford police were very well regarded by Asylum Hill residents. However, their pattern of rotating assignments within a centralized system hindered their development of intimate knowledge of the physical characteristics of the neighborhood, the patterns of crime, and the residents and their concerns. Changes in police operation were thus also dictated.

Finally, the residents themselves contributed to an environment which was favorable to criminal activity by adopting a lifestyle in which they avoided using their streets and yards, minimized their interactions with and knowledge of their neighbors, and refrained from exercising control over outsiders who were present in their neighborhood.

All of the identified conditions were considered to be important in the creation of favorable opportunities for burglary and robbery offenders in North Asylum Hill. It was concluded that many if not all of these conditions would have to be corrected in order to reduce the identified crime problems.



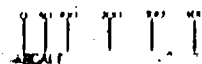
HARTFORD ANTI-CRIME PROJECT Partners: Connecticut

UNITED STATES DEPARTMENT OF JUSTICE
LAW ENFORCEMENT ASSISTANCE & ADMINISTRATION

Revised Edition: March 1991

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The Hartford Bureau of Criminal Justice and the Hartford
Urban Systems Research & Engineering Inc.

NORTH ASYLUM
COMMUNITY AREA
PROJECT MAP



DESIGN OF THE PROGRAM

The major purpose of the program was to effect a comprehensive multi-faceted approach to crime control for the target area. The program would involve the integration of physical redesign, improved policing, and increased resident participation to reduce the incidence of residential burglary and street robbery and fear of those crimes. It was thought that the improved physical environment combined with the introduction of a policing program which was geared to the neighborhood and which emphasized a strong relationship with the residents would create an environment which residents could enjoy using and could control. It was expected that these factors would combine to produce an unattractive target area for offenders, and that the incidence of burglary and robbery would thus decrease.

The design of the program was accomplished in several steps. Very early in the analysis process the program design concepts began to emerge in the form of preliminary conclusions and design concepts which seemed to respond to the identified problems. Following completion of the data analysis, full preliminary designs were developed for each of the three (physical design, police, and resident) strategies. Each strategy was developed with reference to the other two in order to create an integrated approach in which all strategies worked supportively toward the goal of reducing crime opportunities in the neighborhood.

These initial designs were then reviewed to determine whether they were feasible for implementation. Factors considered in this determination were political and community acceptability, cost, and length of time for implementation. These considerations necessitated changes in the original plans which had represented the staff's ideal response to the crime problem analysis.

After each of the above-described steps was completed, the proposals were submitted to city government and the community for scrutiny and comment. Project staff expected that significant additional changes would have to be made before implementation could begin.

Physical Environment Strategies

It was decided that important improvements in the neighborhood could be produced by some relatively simple, inexpensive changes to the public ways. The changes were intended to restrict non-resident vehicular traffic through the area and channel most remaining through-traffic onto two major streets

by blocking or narrowing key intersections. The street treatments were intended to visually define the boundaries of the area and its residential parts, to discourage non-resident pedestrian traffic from interior residential streets, and to make the area more attractive for residential living.

The design for the physical changes included three primary treatments:

- (1) perimeter street cul-de-sacs and intersection narrowings interdicted through vehicular traffic on the east, west, and south boundaries of the neighborhood. These treatments were intended to define the transition from the exterior to the interior residential streets and to discourage pedestrian through traffic as well as to prevent access to vehicles;
- (2) interior and mid-street cul-de-sacs and narrowings diverted the flow of interior vehicular traffic away from certain residential streets in order to define smaller sub-neighborhoods within which residents could feel a heightened sense of control;
- (3) private property fencing was encouraged among the neighborhood residents in order to further reduce the porosity of the area and to further define its residential character.

These physical design treatments were expected to produce a sense of resident ownership and control of their neighborhood by increasing their use of yards, sidewalks, and park areas, and discouraging outside pedestrian use of those spaces, thus heightening resident interest and ability to maintain surveillance. It was expected that these changes would also increase resident interaction, leading to greater neighborhood cohesion.

Police Strategies

The objective for the police strategy was to create an effective neighborhood-centered team. This team should have the autonomy necessary to establish priorities and procedures to address neighborhood public safety problems. It should develop a full understanding of the neighborhood physical and social environments and should establish a cooperative working relationship with the neighborhood residents. Finally, it should establish procedures for the systematic collection, analysis, and use of data about the neighborhood. It was intended that this neighborhood-centered approach to policing would provide an

opportunity for increased communication between police and residents so that each could support the efforts of the other more effectively within the facilitating structure of the physical changes.

Neighborhood team policing was chosen as the vehicle to improve police responses.³ The three major elements of the proposed strategy consisted of the geographic assignment of officers, a decentralized authority of command, and increased interaction with the local community residents. Also included in the model program was a plan to improve police data gathering and analysis capabilities. Geographic assignment would create a stable, permanent team of officers in the project area; decentralized authority would allow decision making at the team level; interaction with the community would allow the formation of an active working relationship between police and community on both formal and informal levels; and systematic collection and utilization of data would allow for more effective utilization of personnel.

Neighborhood team policing was expected to have the following effects. Permanent geographic assignment would allow police to understand the physical and social characteristics of their assigned area in order to more effectively respond to neighborhood needs. Decentralized authority would permit the District Commander to use his superior knowledge of the area in making operational decisions without the need for prior approval from headquarters. The establishment of a mutually supportive relationship between police and community residents would allow the police to better understand and respond to resident concerns, and would in turn give the

³ Classic team policing differs from the Hartford model in that it also incorporates full service responsibilities and participatory management. Full service team policing places at the team level administrative and special services as well as routine field personnel; participatory management gives all police personnel a voice in decision making. Full service team policing was not planned because Hartford's small geographic size made city-wide specialized units impractical; participatory management, although desirable, was not seen as an essential ingredient in the improvement of police services to the community.

residents a better understanding of police problems and limitations and of their own citizen responsibilities in crime prevention. Finally, the plan also anticipated that improved data collection and analysis capabilities of the team would help focus their insights and understanding of the area and would allow for the setting of priorities which would be consistent with those of the neighborhood residents.

Resident Strategies

The plan for resident involvement was directed toward creating community organizations and changing traditional attitudes and behavior patterns, rather than toward producing a detailed program of specific activities for residents to implement. The strategy for organizing the community included: (a) identifying existing community organizations in North Asylum Hill which represented neighborhood concerns; (b) creating community organizations where none existed; and (c) involving the community in the planning of the physical environment changes, the determination of neighborhood policing priorities, and the planning and implementation of resident-operated crime prevention programs.

It was anticipated that these efforts would motivate residents to initiate their own activities directed toward crime reduction and the physical improvement of the neighborhood and that these initial neighborhood activities would lead to increased interaction and cohesion among residents. However, the purpose of the community organization component of the program was not simply or primarily to mobilize residents around community crime prevention activities. This component was seen as essential to implementing all three elements of the program plan. It was expected that resident involvement would serve to integrate the three strategies -- changes in the physical environment, new policing strategies, and formal resident crime reduction activities -- into a single coordinated effort to reduce neighborhood crime and fear.

IMPLEMENTATION

Preparation for program implementation began in the autumn of 1974 with a series of discussions of the proposed plan involving the project staff, City officials, police, residents of the target area, and members of the business community. The discussions were intended to enable staff to explain the program proposals to these various audiences and to elicit their reactions and recommendations. Since it was intended that these groups would be responsible for implementing the program, it was imperative that they feel comfortable with the plan.

Implementation did not begin on a particular day, nor was it a single event. For all program components it was a gradual process. The police and community components were implemented during the first six months of 1975, and were in operation a full year before implementation of the physical changes began. This represented a change from the initial intention to implement all program elements simultaneously.

Physical Design Strategies

The physical design component of the plan was received with considerable skepticism by the community. Initially there was little receptivity to the recommendation that traffic patterns in and about the neighborhood be significantly changed. After the first round of public presentations, it became clear that the proposed physical changes could not gain resident approval without major adjustments in the overall design. Many persons were skeptical that robbery and burglary could be reduced by closing streets and rerouting vehicular traffic. In fact some believed that the closing of some streets would make it easier for offenders to monitor entry and egress and thus identify crime opportunities. Residents believed that crime could be reduced only by increasing the number of police in the area and by having a more responsive judiciary. In addition to their skepticism, residents were concerned about such inconveniences as having to drive around the block to get to and from their homes, or having to walk farther to the nearest bus stop due to a planned rerouting of the buses.

Service providers also objected to the street changes. City staff expressed concern that the changes would impede sanitation trucks and snowplows. More important, although the cul-de-sacs were designed with "knock-down" barriers that would allow passage by emergency vehicles, the police and fire departments and ambulance services voiced concern that the proposed changes would interfere with fast service in emergency situations and that the barriers would damage their vehicles upon impact.

Others objected to the changes as well. A manufacturing company on the northeast side of the area disapproved of the rerouting of its delivery trucks off residential streets. A hospital on the west side felt the proposed plan conflicted with its capacity to accommodate increased hospital traffic expected to be generated by a planned expansion. Some landlords were concerned that the proposed changes would interfere with the marketing of rental units.

The most pressing concerns were raised by small merchants and businessmen in North Asylum Hill who feared that the rerouting of traffic would damage their businesses. Most felt that their businesses depended on non-resident customers who drove through the neighborhood en route to and from work.

A lengthy process of negotiation and compromise proved to be necessary before the physical changes could go forward. This process resulted in compromises which included a reduction in the number of streets to be changed and the abandonment of the plan to use "knock-down" barriers in constructing the cul-de-sacs. It was decided that cul-de-sacs would be constructed with no physical barriers; instead, through vehicular traffic would be interdicted through the use of curbing and traffic signs.

Despite significant adjustments to the plan, which resulted in several additional blocks remaining open, the merchants brought a lawsuit in 1975 to stop the city from implementing the physical changes. The lawsuit, which sought to restrain any changes in traffic patterns, was resolved in the summer of 1976 with an agreement which permitted construction of the changes to go forward but with the understanding that they would be removed if unacceptable to the residents and businessmen after a six-month test period.

A problem also arose in financing the construction of the physical changes. The declining economy eliminated the possibilities of receiving private corporate contributions and of financing the changes out of tax revenues. The consequent necessity of using federal Community Development Act (CDA) funds for materials and Comprehensive Employment Training Act (CETA) funds for labor caused further delays and constraints in implementation, as construction could not begin until all federal approvals were obtained. CDA funds for materials were limited; CETA regulations resulted in the hiring of inexperienced, out-of-work laborers.

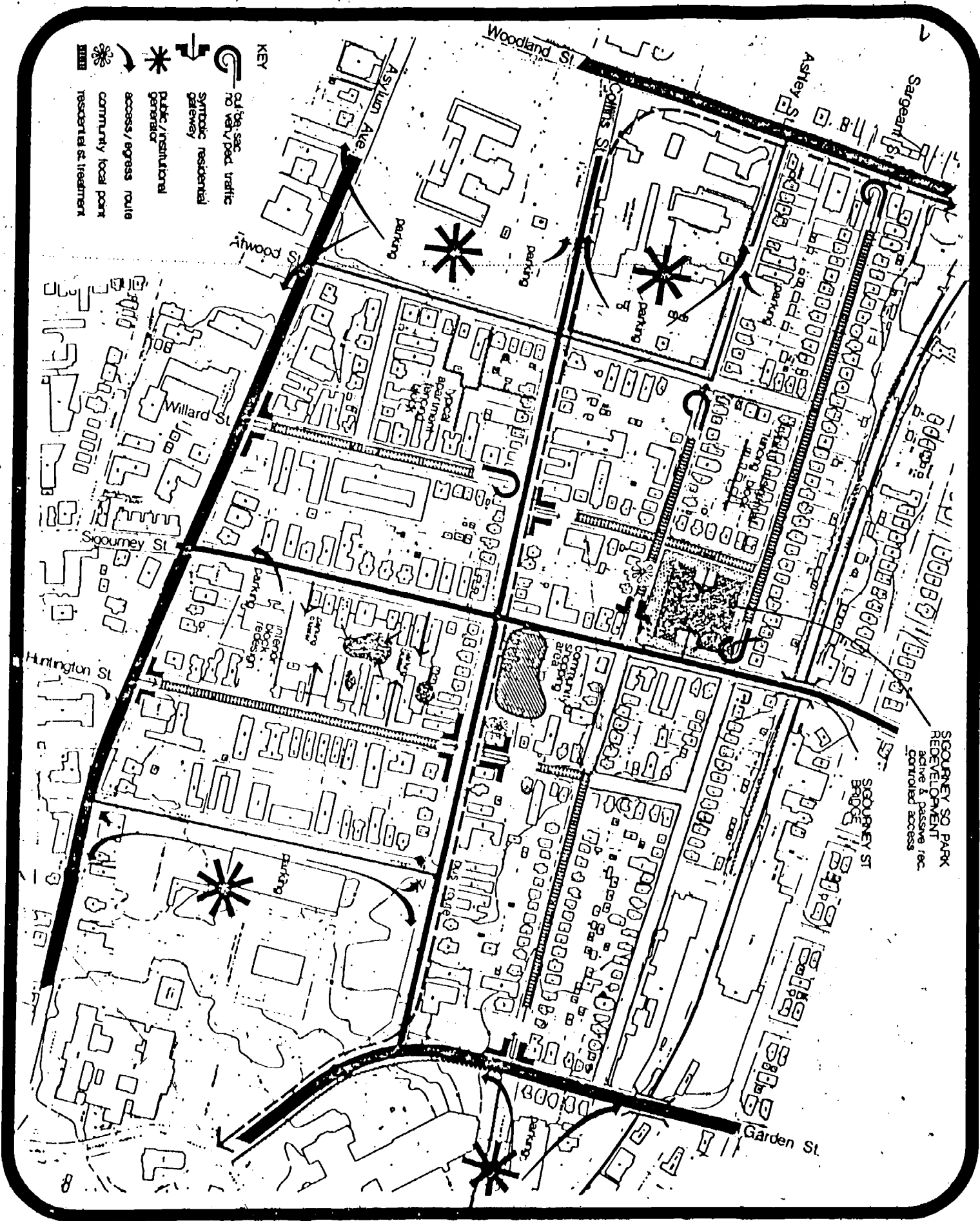
Despite these delays, the street treatments were almost fully completed by the fall of 1976. The remaining work, cosmetic improvements and installation of traffic signs, was completed in the spring of 1977. Four streets were changed into cul-de-sacs and seven others were narrowed at their intersections with more highly trafficked streets. Traffic was rerouted either around the project area or onto two key through-streets, one running east-west and one running north-south. (See Map II, page 17.)

Police Strategies

Neighborhood team policing was implemented in Asylum Hill in early 1975, after several meetings with Chief Hugo J. Masini. Chief Masini, who had recently moved from the New York City force to become Chief in Hartford, was receptive to the implementation of neighborhood team policing in North Asylum Hill with modifications to take into account the needs of Hartford's other police districts.

North Asylum Hill was too small an area to be established as a separate police district. The project staff had therefore recommended that a new special district be created consisting of all of Asylum Hill and Clay Hill/South Arsenal, the two areas initially researched by the project team. This would enable the project to implement neighborhood team policing in the project area almost immediately, yet at the same time would be consistent with the Police Department's ultimate goal of city-wide implementation of neighborhood team policing.

District 5 was created in early 1975 and was divided into two team areas, one each serving Asylum Hill and Clay Hill/South Arsenal. Because the Chief was reluctant to single out one district of the City to receive special treatment, it



HARVARD ANTI-CRIME PROJECT

NORTH ASYLUM
COMMUNITY AREA

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Urban Systems Research & Engineering Inc.

STREET TREATMENTS



was agreed that the Police Department would adopt a system dividing the City into five districts. Thus, while generally being able to maintain district integrity in the use of personnel, District 5 from the beginning had to function within the confines of the city-wide system. This approach was consistent with the project's intention to design a policing system for the target area which would be applied to policing throughout Hartford, rather than an elitist, non-replicable system.

Implementation did not come about easily. There was an initial inability to maintain geographic stability of assigned personnel due to the smallness of the newly established districts, the central location of Asylum Hill and District 5, and the level of manpower in the department. This caused some concern on the part of project staff. Although decentralized authority had been approved by the Chief, team officers were frequently dispatched temporarily to areas outside their assigned district to relieve manpower shortages elsewhere. It was feared that this "crossover" dispatching would seriously hamper the ability of the District Commander to make decisions regarding utilization and deployment of manpower within the district. The inability to vary working hours or to provide overtime pay for attendance at meetings after working hours also precluded regular team meetings, thus making it more difficult for the District Commander to involve line officers in policy making. It also prevented sufficient training time in which the North Asylum Hill officers could begin to understand and learn to take advantage of the physical environment strategies in their day-to-day work. As a result, the concept of considering physical design factors as well as community factors when planning police operations was never fully clarified for or utilized by team members.

After many meetings and compromises between the Chief, the District 5 Commander, and project staff, a system of neighborhood policing began to emerge. Geographic stability of the assigned team of officers was substantially accomplished. The District Commander and his two team commanders began to exercise more authority. In general, the District 5 teams were successful in strengthening their relationship with the community, in joining with community groups to implement several crime prevention activities, and in improving their response to community priorities. They did not give sufficient consideration to the physical environment changes, however, in the routine development and carrying out of their day-to-day operations.

From the beginning of the implementation period the District 5 police were involved in helping the community define its role in the project. During the three months prior to the creation of District 5, the future District Commander and Hartford Institute staff held many meetings with community groups. Their purpose was to explain the program's emphasis on community responsibility in crime reduction and to stress the importance of community input into police planning. These early meetings were intended to form a foundation for a constructive, problem-solving relationship between the police and the community.

Through their increased interaction with community residents and especially through their active involvement with the Police Advisory Committee (see below), the neighborhood police team began to set priorities in response to community concerns. The team instituted walking beats in the area of Sigourney Square Park to discourage loitering, drinking and gambling in the park; it initiated an anti-prostitution squad which arrested "johns" as well as prostitutes; and it implemented anti-robbery and anti-burglary squads which resulted in increased arrests for those crimes. Also as a result of this increased police-community interaction, the neighborhood police took an active part in such community crime prevention activities as Operation Identification and block watch projects, providing supplies and training sessions where needed.

Resident Strategies

The community's role in the project developed in close cooperation with the neighborhood police. It was intended that these two components would function independently. The objective was to test the expectation that a strong relationship between the police and the community would improve the quality of policing in the area, and that community crime prevention efforts would be more successful if they received strong support and assistance from the police.

There was only one community organization in the neighborhood when implementation began. Two community organizations were formed in the spring of 1975, as a result of organizing efforts by the Hartford Institute and the District 5 Police Commander. These new organizations -- Central Asylum Hill Association, and Western Hill Organization -- joined with the established Sigourney Square Civic Association to form a Police Advisory Committee which held regular meetings with the District Commander and the Asylum Hill Team Commander. The function of this Committee was to review and define

problems and to plan appropriate police and community strategies. Through this and other mechanisms the three organizations worked jointly to increase the involvement of North Asylum Hill residents in police decision making and in related efforts intended to reduce opportunities for crime in the target area.

Individually the community organizations initiated such crime control efforts as block watch and burglary prevention programs. The block watch programs consisted of pairs of volunteers who walked the streets armed with citizen band two-way radios and reported suspicious situations to a citizen operator located in the Asylum Hill police field office. The operator then notified the police, who were prepared to respond. The burglary prevention program utilized volunteers to canvass the neighborhood, educating residents about burglary prevention and enlisting them in Operation Identification. Private funds were provided for the citizen band radios used in the block watch programs; the police provided engravers used in the Operation Identification programs.

The community organizations were also involved in the planning and implementation of the physical design strategies. Not only did their membership vote in favor of the street changes, but the organizations took an active role in persuading the City Council and City administration to implement the changes. Once the program had been approved, a monitoring committee was established which included representation of the three organizations to oversee construction and other aspects of the physical changes.

In addition to their direct involvement in crime prevention activities, the organizations initiated other programs designed to increase resident involvement in community improvement in general. These included programs to welcome new neighbors to the area and to invite them to join the community organizations; clean-up campaigns to spruce up the neighborhood; recreational programs for youth; and social functions such as block parties and potluck dinners to which all neighborhood residents were invited, regardless of their membership in the civic associations. Finally, the three organizations were also involved in efforts to stabilize

housing conditions in North Asylum Hill and to improve Sigourney Square Park, a centrally located park in North Asylum Hill which was feared by residents as an unsafe location.⁴

Integration of the Three Elements

The police and resident components were easiest to integrate. Police and community leaders were in agreement that both would benefit from a close working relationship. This relationship was carried out almost on a daily basis. To facilitate discussion of those problems identified in the research, the Hartford Institute employed two new staff people in Comprehensive Employment Training Act (CETA) slots provided by the City of Hartford. These persons worked under the direction of Institute staff and were involved in the project from the beginning. One staff member worked with the neighborhood police team, assisting police in planning and implementing strategies addressing community concerns. The second staff member worked with Asylum Hill residents, developing resident-initiated programs and assisting the community organizations in their interactions with the police.⁵

⁴ In addition, after the end of the evaluation year, the organizations were able to raise monies to fence off the railroad cut bounding North Asylum Hill to the north. Until fenced, this privately owned open area had provided easy entry and escape routes for offenders.

⁵ A third CETA employee was hired to work with residents of Clay Hill/South Arsenal in their community effort which paralleled the resident strategies adopted in Asylum Hill.

Although the police did not systematically incorporate the physical environment changes in planning their routine operations, both the police and the residents did make use of the physical changes to support or facilitate their activities. For example, residents in North Asylum Hill concentrated most of their activities on those streets on which cul-de-sacs had been constructed. They also put pressure on the police to enforce traffic laws and arrest drivers who drove through closed off streets. The police often assigned additional walking patrols to curtail loitering in and around Sigourney Square Park, which was bounded on three sides by cul-de-sacs. On a few occasions they were able to develop strategies of apprehension around the presence of the closed streets.

Final Comment About Implementation

The programs that were actually implemented varied considerably from the initial intentions of the project team. Compromises were made which had both negative and positive impacts. Negative consequences included a delay in implementation which could be critical in some environments, and the possibility of a less positive impact on crime and fear than the original proposed program was expected to produce. In addition, because of the elimination of some of the proposed physical changes, it was more difficult to evaluate the impact of the physical changes as a discrete element of the project.

However, in the absence of willing, interested and committed partners like the police, residents, merchants, politicians, and others, the project team would have mistakenly insisted that their initial strategies be implemented without change. While the process of compromise was time consuming and often painful, it served to strengthen implementation. Each compromise resulted in increased participation by those who would have to make the program work and increased responsiveness to the needs of those toward whom the program was directed.

EVALUATION

Introduction

The theory on which this project was based posits that the design of the physical environment and its use by police and residents can create conditions which either promote or inhibit criminal opportunities. Prior to program implementation, the physical environment of North Asylum Hill and its impact on police operations and on area residents had fostered conditions in which crime opportunities were prevalent. Thus, the goals of the project were to modify the design and use of the physical environment in order to reduce criminal opportunities and to promote police and resident behavior that would act to control neighborhood crime and fear. The program was evaluated in order to determine (1) its degree of successful implementation; (2) its effectiveness in achieving the desired impacts on crime (burglary and robbery) and fear in the target area; and (3) the degree to which these impacts occurred through promotion of police and resident crime control behavior.

The formal evaluation took place during the period from July, 1976 through June, 1977, and was comprised of the following three separate but related parts:

1. A detailed documentation and assessment of the implementation process, comparing the program actually undertaken with the program initially developed by the project staff and explaining the disparities between them;
2. An assessment of the impact of the program on crime and fear; and
3. An evaluation of the validity of the underlying theory that the program would produce changes in the behavior and attitudes of the residents and police which would contribute to a reduction in crime and fear.

Assessment of Program Implementation

The information for assessing program implementation came from four sources. First, the Hartford Institute provided periodic written reports describing (a) community organization activities; (b) the progress made in implementing the physical design and police strategies; and (c) other

events in Hartford that might affect the experiment. Second, police activities were monitored through on-site visits every six weeks by an outside observer who is an experienced consultant to police departments. Third, both the changes in the physical environment and the resultant changes in the use of these spaces were also monitored systematically on several occasions. Precise data on vehicular traffic, pedestrian use, etc., was collected. Fourth, a panel of about thirty individuals, including community leaders, businessmen, realtors and residents who had not participated in project activities, were interviewed twice during the experimental year regarding events in the neighborhood. These sources were supplemented by periodic meetings between the evaluation staff and the Hartford Institute staff to discuss project problems and accomplishments and to monitor neighborhood incidents which might have an effect on program implementation or impact.

Assessment of the Effect on Crime and Fear

The assessment of the program's impact on crime and fear, was based primarily on the following quantitative measures:

1. Citizen surveys including victimization counts "before" (in 1973, 1975, and 1976) and "after" program implementation (in 1977);
2. Police record data for all five years, including number of incidents by crime, location of offenses, arrests, and characteristics of arrested offenders;
3. Police officer questionnaires completed "before" (late in 1975) and "after" program implementation (in the spring of 1977);
4. Vehicular and pedestrian traffic counts on key streets taken "before" the street changes were implemented (in 1975 and early 1976) and "after" (in 1977); and
5. Use of space surveys conducted "before" (in 1975 and 1976) and "after" implementation of the street changes (in 1977).

The evaluation utilized these data in two types of analytic comparisons:

1. A comparison of crime rates for burglary and street robbery/pursesnatch in North Asylum Hill "before" (1973, 1975, and 1976) and "after" (1977) program implementation; and
2. A comparison of these crime rates in North Asylum Hill with those in a number of control areas and in the City of Hartford as a whole in 1973, 1975, 1976, and 1977.

Assessment of the Effect on Police and Resident Behavior

In structuring the evaluative tools the program team was aware that there should be intermediate linkages between the program goals to reduce crime and fear and the actual results. Changes would have to occur in police and resident attitudes and behavior which would influence the program outcome. Therefore, the program evaluation should measure these sub-results in order to establish that any reductions in crime and fear were the direct result of the program.

The same sources of quantitative data, especially the citizen surveys, police interviews, and use of space surveys, were used to measure the degree to which the program effected the expected changes in police and resident behavior theoretically relevant to crime and fear. Anticipated behavioral modifications included changes in resident ability to recognize strangers; changes in the number of residents who had agreements with neighbors to watch each other's residences; changes in resident use of neighborhood streets; changes in police attention to community concerns; and changes in the degree of police interaction with neighborhood residents.

FINDINGS

This section will discuss the findings of the program based on the types of evaluation described above. First, the impact of the overall program on the target crimes and their attendant fear is discussed. Second, the effect of the physical, police, and resident strategies on police and resident attitudes and behavior is examined, as is the interactive relationship of the three program strategies.⁶

Impact on Crime and Fear

Using the year ending June 30, 1976 as the base year (1976) and the year ending June 30, 1977 as the evaluation year (1977), it was determined that the rates of these crimes have in fact begun to turn around. Burglary rates showed a substantial reduction. Robbery rates have at least stopped climbing, and may have also undergone a reduction. There have been corresponding reductions in fear levels and little evidence of displacement to other geographic areas or to other crimes.

Crime Rates. Based on the victimization surveys, it was determined that burglary rates dropped from 18.4 per 100 households in 1976 to 10.6 per 100 households in 1977. This represented a 42% decrease. (See Table 1, page 27.) Had burglary continued to increase in 1977 at the same rate as in the three years ending in 1976, the 1977 rate would have been 22 per 100 households. Thus the 1977 rate represents less than half of what would have been predicted.

⁶ The terms "significant"/"statistically significant" are used with caution by the Center for Survey Research evaluators and in this summary. The criterion used was that the change or difference observed had to be large enough that it could have happened by chance fewer than 5 times in 100. Changes or differences that would have occurred by chance only 1 in 5 times are sometimes noted, but readers are warned to treat them with caution. The calculations on which these probabilities are based take into account the specific sample design used in this project.

TABLE 1

BURGLARY VICTIMIZATION BY AREA
(rates per 100 households)

	Before Program Completion			After Program Completion
	1973 ^a	1975 ^a	1976 ^a	1977 ^a
North Asylum Hill	7.5	14.8	18.4	10.6
South Asylum Hill	2.2	4.6	7.8	7.7
North and west adjacent area	8.2	10.2	b	13.7
Total City	9.8	12.1	b	15.3

^a 1973 rates are for the calendar year; other rates are for fiscal years, with 1975 running from July 1, 1974 to June 30, 1975; 1976 from July 1, 1975 to June 30, 1976; and 1977 from July 1, 1976 to June 30, 1977.

^b Data not available for this time period.

Robbery/pursesnatch victimization decreased from 5.1 persons per 100 in 1976 to 3.7 per 100 in 1977, a decrease of 27.5%. (See Table 2, page 29.) In 1975 this rate had been 3.6 per 100. If the 1975-76 trend had continued through 1977, the rate would have been 6 per 100. Although the number of incidents reported in the victimization survey is insufficient to provide statistically significant evidence of a reduction, it is apparent that the rising trend was halted and may even have been reduced somewhat. Police incident data for the two years seems to confirm this reduction. Police incident data also confirms that between 1976 and 1977 there was a significant shift of street robbery/pursesnatch from interior residential streets to main thoroughfares. (See Table 3, page 30.) ⁷

⁷ Unlike victimization data which report only those robberies in which victims were neighborhood residents, police incident data reflect all robberies which took place in a neighborhood regardless of the victims' places of residence. Thus, police incident data is valuable in confirming the victimization data for robberies. Also, the finding that there was a shift in robberies from interior to main streets was based on police incident reports.

TABLE 2

ROBBERY/PURSES/NATCH VICTIMIZATION BY AREA
(rates per 100 persons)

	Before Program Completion			After Program Completion
	1973 ^a	1975 ^a	1976 ^a	1977 ^a
North Asylum Hill	2.7	3.6	5.1	3.7
South Asylum Hill	0.8	4.1	3.6	7.9
North and west adjacent area	2.0	2.0	b	2.2
Total City	1.0	2.1	b	6.5

^a 1973 rates are for the calendar year. Other rates are for fiscal years. See Table 1.

^b Data are not available for this time period.

TABLE 3

LOCATION OF STREET ROBBERIES IN ASYLUM HILL

	<u>Before Program Completion</u>	<u>After Program Completion</u>
	<u>1976</u>	<u>1977</u>
<u>Target Area</u> <u>(North Asylum Hill)</u>		
Main Street	36%	58%
Side Street	<u>64%</u>	<u>42%</u>
TOTAL %	100	100
 <u>Control Area</u> <u>(South Asylum Hill)</u>		
Main Street	42%	52%
Side Street	<u>58%</u>	<u>48%</u>
TOTAL %	100	100

Displacement. There is no evidence of geographic displacement of burglary from North Asylum Hill to adjacent areas. Burglary rates in South Asylum Hill and in areas north and west remained relatively stable. Further, it appears unlikely that the reduction in target area burglary led to displacement to other types of crime since there were no significant increases in crime rates for other property crimes.

There was a significant increase in the rate of robbery in South Asylum Hill in 1977, more than would be expected from a continuation of an increasing trend of previous years. Whether this increase represented displacement of robbery from North Asylum Hill must remain conjecture. Since evidence of reduction of street robbery in North Asylum Hill is inconclusive, a corresponding increase in street crime in adjacent areas may or may not be attributable to displacement. Assuming the program was in fact successful in reducing robbery opportunities in North Asylum Hill, the observed increase in robbery in South Asylum Hill could be the result of displacement from North Asylum Hill, because South Asylum Hill is similar to North Asylum Hill and is located adjacent to it.

Fear.⁸ The decline in residential burglary was accompanied by a significant decline in the fear of burglary. (See Table 4, page 32.) Residents were asked three types of questions regarding their perceptions and concerns about burglary: (1) their rating of the severity of the problem in their neighborhood; (2) the degree to which they worried about becoming a victim; and (3) the likelihood of their being a victim within a year. Except for the rate at which residents worried about becoming a victim, responses showed a significant reduction in fear of burglary, a pattern consistent with the observed decline in the burglary rates.

⁸ The term "fear of crime" is not used here in a precise way. As is the case with its use in the literature, it includes a variety of aspects of the subjective perceptions and emotional responses to the threat of crime. To use "subjective response" to crime seemed needlessly pendent. However, interested readers should know that the researchers were careful in their measurements to differentiate among the various elements of which "fear of crime" consists.

TABLE 4

PERCEPTION OF BURGLARY AS A NEIGHBORHOOD CRIME PROBLEM^a

	Before Program Completion			After Program Completion
	<u>1973</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>
<u>North Asylum Hill</u>				
Big problem	21%	35%	46%	31%
Some problem	33	46	35	44
Almost no problem	46	19	19	25
TOTAL	100	100	100	100
<u>South Asylum Hill</u>				
Big problem	20%	17%	25%	25%
Some problem	31	41	52	42
Almost no problem	49	42	23	33
TOTAL	100	100	100	100
<u>Total City</u>				
Big problem	19%	28%	b	21%
Some problem	37	41		40
Almost no problem	44	31		39
TOTAL	100	100		100

^a See Table 1 for explanation of dates^b Data not available for this time period

A parallel set of questions was asked about robbery, as well as a question concerning how safe residents felt walking alone on their streets during the day. Although not statistically significant, there appeared to be slightly less fear of robbery in 1977 than in 1976, indicating a possible reduction in the level of fear which paralleled the possible reduction in the robbery rates. (See Table 5, page 34.) There was also slightly less fear on the part of residents when walking alone, although again the change from 1976 to 1977 was too small to be statistically significant. (See Table 6, page 35.)

TABLE 5

PERCEPTION OF ROBBERY AS A NEIGHBORHOOD CRIME PROBLEM ^a

	Before Program Completion			After Program Completion
	1973	1975	1976	1977
<u>North Asylum Hill</u>				
Big problem	20%	21%	34%	26%
Some problem	38	41	30	45
Almost no problem	42	38	36	29
TOTAL	100	100	100	100
<u>South Asylum Hill</u>				
Big problem	22%	20%	35%	35%
Some problem	36	44	37	53
Almost no problem	42	36	38	12
TOTAL	100	100	100	100
<u>Total City</u>				
Big problem	14%	17%	b	15%
Some problem	32	25		30
Almost no problem	54	58		55
TOTAL	100	100		100

^a See Table 1 for explanation of dates.

^b Data not available for this time period.

TABLE 6

DEGREE OF SAFETY FELT WHEN ALONE IN THE
NEIGHBORHOOD IN THE DAYTIME

	<u>Before Program Completion</u>		<u>After Program Completion</u>
	<u>1975</u>	<u>1976</u>	<u>1977</u>
<u>North Asylum Hill</u>			
Very safe	32%	30%	31%
Reasonably safe	58	41	50
Somewhat safe	7	20	13
Very unsafe	<u>3</u>	<u>9</u>	<u>6</u>
TOTAL	100	100	100
<u>South Asylum Hill</u>			
Very safe	44%	38%	27%
Reasonably safe	41	48	51
Somewhat safe	4	10	17
Very unsafe	<u>4</u>	<u>4</u>	<u>5</u>
TOTAL	100	100	100
<u>Total City</u>			
Very safe	43%	a	37%
Reasonably safe	41		46
Somewhat safe	10		11
Very unsafe	<u>6</u>		<u>6</u>
TOTAL	100		100

a. Data not available for this time period.

Summary of Impact on Crime and Fear

The following summarize the major program impacts on crime and fear for the two target crimes of burglary and robbery:

Burglary:

1. A significant (42%) reduction in burglary rate in the target area between 1976 ("before") and 1977 ("after" program implementation), reversing a pre-program trend of increasing burglary (up 145% between 1973 and 1976);
2. A parallel (33%) reduction in fear of burglary in the target area following program implementation, again reversing a pre-program pattern of increasing fear (up 54% between 1973 and 1976);
3. A marked difference in target area and control area burglary rate patterns following program implementation.⁹ Although their pre-program patterns showed similar burglary rate increases (between 1973-5 and 1975-6), the significant post-program (1976-7) reduction in target area burglary is in contrast to the control area pattern, which showed no decrease in burglary for the same post-program period.

⁹ The design of this project was not to use a single matched control area with which to compare North Asylum Hill. Rather, data were collected city-wide and for areas adjacent to North Asylum Hill. Areas were used which provided a reasonable basis of comparison with North Asylum Hill.

Robbery:

1. A 27.5% reduction in robbery rate in the target area between 1976 ("before") and 1977 ("after" program implementation). Although smaller than the reduction in burglary rate, and although too small to be statistically significant, these findings seem to reverse a pre-program trend of increasing robbery (up 89% between 1973 and 1976);
2. A parallel 24% reduction in fear of robbery in the target area following program implementation. Again, these findings are less marked than for fear of burglary (in line with robbery's smaller reduction in actual crime rate), but they reverse a pre-program pattern of increasing robbery fear occurring between 1973 and 1976;
3. A difference in target area and control area robbery rate patterns following program implementation. Although their pre-program patterns showed overall increases in robbery (Refer to Table 2, page 29), the post-program (1976-7) reduction in target area robbery is in contrast to the control area pattern, which showed a continued increase in robbery for the same post-program period.

Impact of Physical, Police, and Community Strategies on Police and Resident Behavior

Effects of the Physical Environment Strategies. It was expected that the changes in the physical environment would discourage through vehicular traffic from interior residential streets and force it onto streets intended for heavier use. The improved definition of neighborhood boundaries was expected to increase resident use of and control over the neighborhood and to increase resident cohesion and interaction.

The street treatments did have the expected impacts on the use of the physical environment. Vehicular traffic diminished throughout the area. Those streets that were changed into cul-de-sacs had marked decreases in vehicular traffic (up to 80%); narrowed interior streets also showed reductions. As anticipated the two streets left open to carry traffic through the area showed a modest increase in traffic. (See Table 7, page 38.)

TABLE 7

CHANGE IN VEHICULAR TRAFFIC BY TYPE OF STREET TREATMENT ^a

Type of Treatment ^b	Vehicles Counted		Percent Change
	1976	1977	
Blocked ¹	7,343	1,850	-75
Narrowed			
Entrance to cul-de-sac ²	2,303	2,780	+21 ^c
Other ³	6,123	4,185	-32
Total narrowed	8,426	6,965	-17
Untreated			
Interior residential ⁴	8,219	6,963	-15
Interior collector ⁵	24,296	26,424	+ 9
Border streets ⁶	38,886	41,229	+ 6
Total border/collector	63,182	67,653	+ 7
Total untreated	71,401	74,616	+ 5
Totals			
Interior residential	23,988	15,778	-34
Interior	48,284	42,202	-13
All streets	87,170	83,431	- 4

¹ Includes Sargeant and Ashley Streets west of Sigourney

² Includes May and Willard Streets

³ Includes Ashley Street (east of Sigourney) and Huntington Street

⁴ Includes Atwood Street and Sargeant Street (east of Sigourney)

⁵ Includes Sigourney and Collins Streets

⁶ Includes Woodland Street, Asylum Avenue, and Garden Street

^a See Map II, page 17.

^b Streets with both types of treatments are categorized according to the treatment nearest the counter.

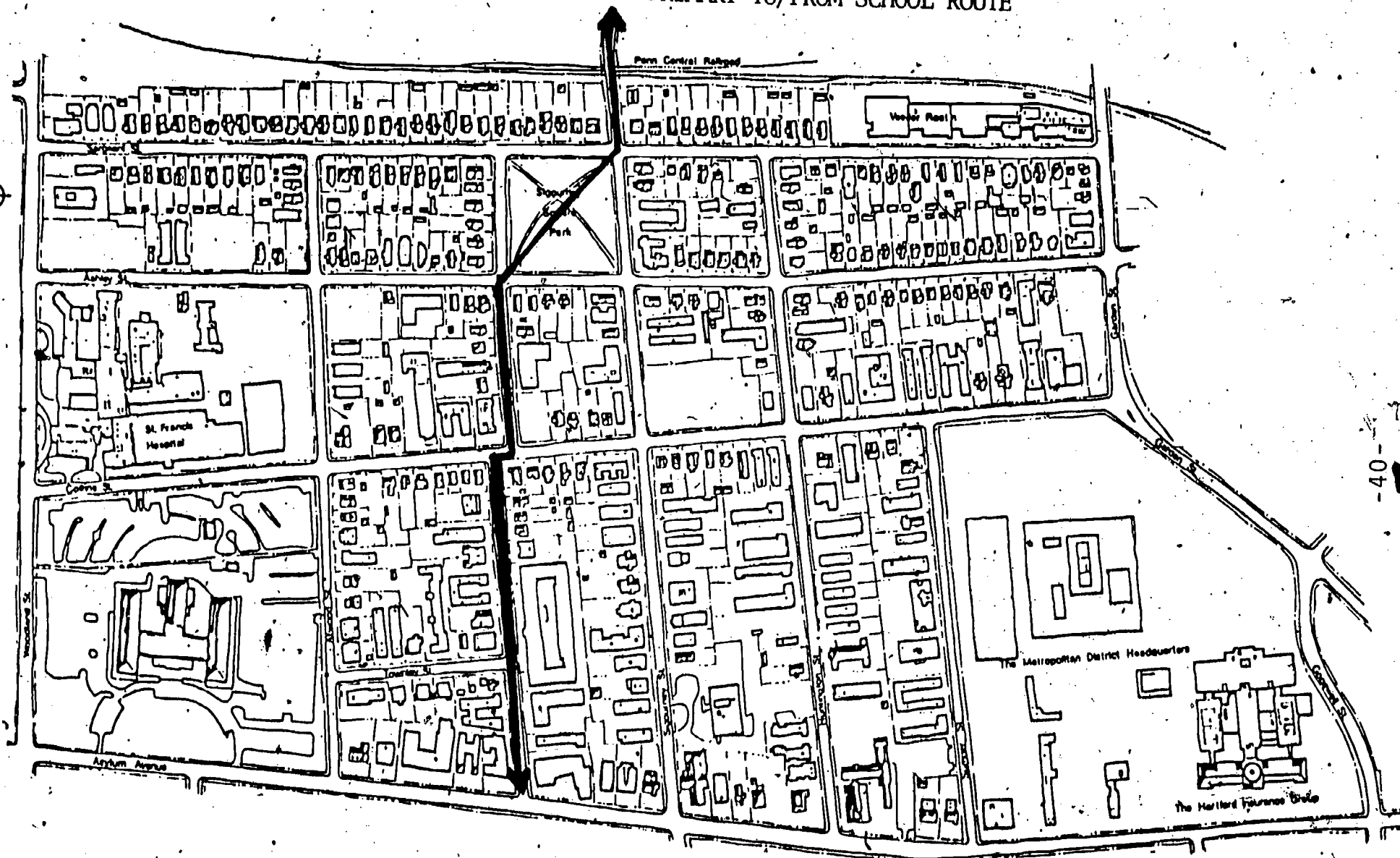
^c This increase in traffic reflects the absence of other entrance to those streets with cul-de-sacs, and thus the fact that vehicles were counted twice -- upon entry into the street and upon exit.

Analysis of the pedestrian counts indicates a possible restructuring of pedestrian traffic, particularly the routes used by students commuting to and from school. Although the east-west patterns remained unchanged, the north-south patterns became more concentrated, indicating less dispersion and random wandering through North Asylum Hill. (See Map III, page 40.)

At the same time that outside vehicular traffic decreased, there was increased use of the streets and parks by residents. In response to survey questions, significantly more North Asylum Hill residents in 1977 said they walked in the neighborhood at least a few times a week than in 1976. (See Table 8, page 41.)¹⁰ There was also a modest increase in the number who said they liked to use Sigourney Park, located in the center of the neighborhood.

¹⁰ The pedestrian counts yielded inconclusive evidence of increased use of streets by residents. Although there appeared to be slight increases in the use of the streets by people over 35, females, and whites, the differences were too small to be statistically reliable. Moreover, it was impossible for the persons conducting the counts to differentiate between residents and non-residents. In addition, the same people may have been counted more than once. For these reasons the survey responses were considered a much more reliable indication of resident use of the streets than the pedestrian counts.

PRIMARY TO/FROM SCHOOL ROUTE



NORTH ASYLUM HILL COMMUNITY AREA

-40-

TABLE 8

FREQUENCY OF WALKING IN THE NEIGHBORHOOD DURING THE DAYTIME

	<u>Before Program Completion</u>		<u>After Program Completion</u>
	<u>1975</u>	<u>1976</u>	<u>1977</u>
<u>North Asylum Hill</u>			
Almost daily	35%	34%	49%
Few times a week	18	20	21
Once a week	10	13	10
Less often	12	18	9
Never	<u>25</u>	<u>15</u>	<u>11</u>
TOTAL	100	100	100
<u>South Asylum Hill</u>			
Almost daily	34%	a	34%
Few times a week	24		24
Once a week	11		12
Less often	13		14
Never	<u>18</u>		<u>16</u>
TOTAL	100		100

a Data not available for this time period.

Effects of Police Strategies. Neighborhood team policing was expected to produce a more effective deployment of police resources in the project area. It was anticipated that the police team would develop a better understanding both of the area's social and physical features and of its problems and that police policies and operations would be tailored to community needs. These improvements were expected to improve overall police effectiveness and, finally, to result in reductions in burglary and robbery rates.

There was in fact a substantial increase in arrests for burglary and robbery by the neighborhood police team, providing concrete evidence of enhanced police effectiveness against the target crimes. (See Table 9.)

TABLE 9

NUMBER OF ARRESTS FOR RESIDENTIAL BURGLARY
AND STREET ROBBERY IN ASYLUM HILL

	Before Program Completion	After Program Completion	
	1975 ^a	1976 ^a	1977 ^a
<u>North Asylum Hill</u>			
Residential burglary	30	57	58
Street robbery	5	37	40
<u>South Asylum Hill</u>			
Residential burglary	10	14	20
Street robbery	2	15	41
<u>Total Asylum Hill</u>			
Residential burglary	40	71	78
Street robbery	7	52	81

^a See Table 1 for explanation of dates. Although the program was not completely implemented until late 1976, the police component was fully operational by July 1, 1975.

The project produced some striking changes in police attitudes about their own effectiveness, about the community, and about their relationship with its residents. According to the results of questionnaires answered by team officers, there was a perceived marked improvement in their overall success in reducing crime, their rate of clearing cases, and the extent to which burglary and robbery were diminished as problems in the neighborhood. Police team members indicated substantial improvements in their perceptions of the neighborhood as a place to live, of the willingness of residents to assist the police, and of resident input into police operations in North Asylum Hill. (See Table 10.)

TABLE 10

ASYLUM HILL POLICE RATING OF OVERALL RELATIONS
BETWEEN POLICE AND CITIZENS IN TEAM AREA

	Before Program Completion	After Program Completion
	Fall, 1975	Spring, 1977
Very good	0%	9%
Good	18	50
Fair	58	36
Poor	24	5
TOTAL	100%	100%

The relationship between police activities and the physical environment did not develop as intended, however. Patrol officers questioned the connection between the physical changes and crime prevention. Officers felt that the physical changes impeded routine patrol efforts; they did not believe that the changes were of significant use to them in their efforts to prevent crime and apprehend criminals. As noted earlier, the relevance of the physical changes to crime prevention had never been emphasized; instead this aspect of the program had been overshadowed by emphasis on the importance of developing a strong relationship with community residents.

Effects of the Resident Strategies. The resident strategies revolved around the community organizations. The organizations, two of which had been formed during implementation, initiated community crime prevention activities, attempted to involve the North Asylum Hill community in crime control efforts, and were intended (as were the physical changes) to serve as vehicles for spurring social interaction among neighborhood residents. In addition to the community organizations, the Asylum Hill Police Advisory Committee was created to provide a forum for police-community communication and cooperation.

It was intended that these organizations and activities would cause changes in resident behavior which would lead to a reduction in crime. First, they were expected to foster an awareness of citizen responsibility in preventing crime. Second, through these organizations resident interaction was expected to increase, leading to a greater sense of neighborhood unity. Third, the increased resident interaction was expected to lead to greater resident use of the neighborhood, thus making the neighborhood less attractive to offenders. Finally, the Police Advisory Committee was expected to bring police and residents together to mutually resolve crime-related problems. It was hoped that this increased interaction between police and residents would foster a mutual understanding and appreciation.

An increase in assumption of individual responsibility for crime prevention by neighborhood residents is evidenced by an increase in housewatch agreements between neighbors. In 1977 residents were almost twice as likely as in 1976 to have routine arrangements with neighbors to watch each others' dwelling units: (See Table 11, page 45.)

TABLE 11

FREQUENCY OF MAKING ARRANGEMENTS WITH NEIGHBORS TO WATCH
EACH OTHERS' HOUSES

	Before Program Completion		After Program Completion
	1975	1976	1977
Target Area (North Asylum Hill)			
All the time ^a	17%	14%	26%
Special occasions	25	21	16
No special arrange- ments made (or type not ascertained)	58	65	58
TOTAL	100	100	100

^a Although the total percentage of those who made special arrangements shows no increase over 1975, the percentage of those who routinely ("all the time") make arrangements shows a substantial increase.

This increase in housewatch agreements is also an indicator of increased resident interaction. In addition, a significant increase in stranger recognition by community residents was also found, indicating that residents were getting to know each other well enough to discriminate between residents and outsiders. (See Table 12, page 46.) However, other than the increase in housewatch agreements and an improved ability to differentiate between residents and outsiders, there is little evidence of improved resident interaction and relationships. Although slightly more residents were positive about the neighborhood in 1977 than in 1976, there was little difference in responses to questions concerning whether residents feel part of the neighborhood and whether residents are helpful to each other. (See Table 13, page 47; Table 14, page 48; and Table 15, page 49.) This lack of change in such fundamental attitudes and behavior, however, could be due to the short evaluation period of less than a year. Some of the anticipated benefits, particularly basic changes in resident attitudes and behavior, would reasonably

take longer to materialize. An evaluation at the end of two or three years would provide a more conclusive measure of the effectiveness of the project in bringing about such fundamental changes in resident behavior.

TABLE 12
EASE OF STRANGER RECOGNITION IN NEIGHBORHOOD

	<u>Before Program Completion</u>		<u>After Program Completion</u>
	<u>1975</u>	<u>1976</u>	<u>1977</u>
<u>North Asylum Hill</u>			
Pretty easy	26%	25%	32%
Pretty hard	<u>74</u>	<u>75</u>	<u>68</u>
TOTAL	100	100	100
<u>Total City</u>			
Pretty easy	48%	a	53%
Pretty hard	<u>22</u>		<u>47</u>
TOTAL	100		100

^a Data not available for this time period.

TABLE 13
CHANGE IN THE NEIGHBORHOOD AS A PLACE TO LIVE IN
THE PAST YEAR

	<u>Before Program Completion</u>		<u>After Program Completion</u>
	<u>1975</u>	<u>1976</u>	<u>1977</u>
<u>North Asylum Hill</u>			
Better	19%	12%	18%
About the same	45	38	42
Worse	<u>36</u>	<u>50</u>	<u>40</u>
TOTAL	100	100	100
 <u>Total City</u>			
Better	7%	a	13%
About the same	57		59
Worse	<u>36</u>		<u>28</u>
TOTAL	100		100

a Data not available for this time period.

TABLE 14

HOW RESIDENTS FEEL ABOUT THE NEIGHBORHOOD

	<u>Before Program Completion</u>		<u>After Program Completion</u>
	<u>1975</u>	<u>1976</u>	<u>1977</u>
<u>North Asylum Hill</u>			
Feel part of a neighborhood here	39%	24%	33%
Just a place to live	<u>61</u>	<u>76</u>	<u>67</u>
TOTAL	100	100	100
<u>Total City</u>			
Feel a part of a neighborhood here	46%	a	50%
Just a place to live	<u>54</u>		<u>50</u>
TOTAL	100		100

a Data not available for this time period.

TABLE 15

PERCEPTION OF HELPFULNESS OF NEIGHBORS

	<u>Before Program Completion</u>		<u>After Program Completion</u>
	<u>1975</u>	<u>1976</u>	<u>1977</u>
<u>North Asylum Hill</u>			
Help each other	46%	21%	35%
Go their own ways	<u>54</u>	<u>79</u>	<u>65</u>
TOTAL	100	100	100
<u>Total City</u>			
Help each other	48%	a	48%
Go their own ways	<u>52</u>		<u>52</u>
TOTAL	100		100

^a Data not available for this time period.

As pointed out earlier, there was evidence of increased use of the neighborhood by residents with the percentage of those who said they walked in the neighborhood almost daily during the daytime climbing from 34% in 1976 to 49% in 1977. (Refer to Table 8, page 41.)

Stranger recognition was also linked to increased use of the neighborhood. The more frequently people said they walked in the neighborhood, the more likely they were to recognize strangers. (See Table 16, page 50.) This increased use of the neighborhood by residents and increased stranger recognition may have made the neighborhood less attractive to offenders and thus may have been a causal factor in the reduction of crime in North Asylum Hill.

TABLE 16

EASE OF STRANGER RECOGNITION IN NEIGHBORHOOD BY FREQUENCY
OF WALKING IN THE NEIGHBORHOOD FOR 1977 NORTH
ASYLUM HILL RESIDENTS

Frequency of Walking	Stranger Recognition	
	Pretty Easy	Pretty Hard
A few times a week ^a or more ^a	82%	63%
Once a week or more ^a	18	36
TOTAL	100	100

^a Combined response categories.

Although there was an improvement in police attitudes toward the neighborhood, its residents, and the police-community relationship (see page 43), resident attitudes about the police did not improve during the test year. Instead, there was a decline in the number of positive resident ratings of police performance, as measured by responses to three key questions concerning quickness with which police respond to calls for help, effectiveness in protecting people, and treatment of people. (See Table 17, page 51; Table 18, page 52; and Table 19, page 53.) Two phenomena may have contributed to the decline in citizen ratings of the police. First, there was a reduction in police manpower in the target area (and in Hartford in general) which residents may have perceived as reflecting a reduced police effectiveness. This possibility is supported by the survey findings that residents saw the police in the neighborhood less frequently during the test period. Second, most of the negative ratings of police occurred among black residents, many of whom were new residents in the neighborhood. It is conceivable that these lower ratings by blacks were reflecting their previous experiences with police in other parts of Hartford where ratings of the police have traditionally been lower than those in Asylum Hill. If so, their ratings would be expected to improve with length of residence in the target area.

TABLE 17

PERCEPTION OF POLICE RESPONSE TIME WHEN SOMEONE-
IN NEIGHBORHOOD CALLS FOR HELP

	<u>Before Program Completion</u>		<u>After Program Completion</u>
	<u>1975</u>	<u>1976</u>	<u>1977</u>
<u>North Asylum Hill</u>			
Come right away	72%	49%	53%
Take a while	9	25	26
Don't know	<u>19</u>	<u>26</u>	<u>21</u>
TOTAL	100	100	100
<u>Total City</u>			
Come right away	60%	a	56%
Take a while	19		24
Don't know	<u>21</u>		<u>20</u>
TOTAL	100		100

a Data not available for this time period.

TABLE 18

RATING OF JOB HARTFORD POLICE DEPARTMENT DOES IN PROTECTING PEOPLE IN THE NEIGHBORHOOD

	<u>Before Program Completion</u>		<u>After Program Completion</u>
	<u>1975</u>	<u>1976</u>	<u>1977</u>
<u>North Asylum Hill</u>			
Very good	27%	14%	21%
Good enough	53	47	40
Not so good	13	25	28
Not good at all	<u>7</u>	<u>14</u>	<u>11</u>
TOTAL	100	100	100
<u>Total City</u>			
Very good	29%	a	19%
Good enough	45		53
Not so good	18		22
Not good at all	<u>8</u>		<u>6</u>
TOTAL	100		100

^a Data not available for this time period.

TABLE 19

PERCEPTION OF HOW HARTFORD POLICE TREAT PEOPLE
IN THE NEIGHBORHOOD

	<u>Before Program Completion</u>		<u>After Program Completion</u>
	<u>1975</u>	<u>1976</u>	<u>1977</u>
<u>North Asylum Hill</u>			
Very well	30%	28%	25%
Well enough	56	54	44
Not so well	12	9	22
Not well at all	2	9	9
TOTAL	100	100	100
<u>Total City</u>			
Very well	36%	a	27%
Well enough	48		55
Not so well	11		12
Not well at all	5		6
TOTAL	100		100

a Data not available for this time period.

Interactive Effects of the Physical, Police, and Resident Strategies. A basic concept of the program was that the interaction of the physical, police, and resident strategy components was essential to overall success. Because of the complementarity established among these components, it is difficult to dissociate the effects of one from the others. Each component not only made a direct impact on crime and fear but also increased the impact of the other program components.

The most controversial and innovative part of the program was its physical design component. A basic question, therefore, was whether the program would have worked as well without street changes. The process of implementation provided evidence that the physical design strategies made the crucial difference between presence and absence of program impact. The police and community organization components were implemented in North Asylum Hill at least a year before the physical design component. However, with the exception of the increase in police arrests, none of the positive impacts on the neighborhood discussed in this section occurred until the physical changes had been completed.

The police and resident strategies began implementation at the same time and in concert with each other. In fact, it is difficult to treat the two strategies as separate components. The thrust of Hartford's neighborhood team policing program was toward developing an understanding of the area, a strong relationship with its residents, and an ability to gear its priorities to correspond to the concerns of the target community. Examples of police responsiveness to resident concerns include the anti-prostitution effort, the work to reduce loitering and control the use of the parks and nearby streets, and the anti-burglary and anti-robbery campaigns. The increased arrests for burglary and robbery provide evidence not only of police effectiveness in responding to resident concerns, but also of an increased understanding of the target area as a whole.

In developing and implementing crime prevention activities the community organizations relied on police support and resources. The block watch programs depended on the police team for support and training services, without which they might not have gained the momentum which has enabled them to continue to be strong crime prevention efforts. Without police endorsement and engravers, Operation Identification might have

been less well received by area residents. Without the Police Advisory Committee to provide a forum for police-community discussion, the police might not have learned about those problems of concern to Asylum Hill residents and thus might not have developed strategies to address those problems.

As pointed out above, although the police and resident strategies contributed to the achievement of the program goal, the changes did not come about while only those two strategies were in operation. However, this does not mean that the physical environment strategy was the most important or the only important program component. It does lead to the conclusion that this component created an atmosphere in which the effectiveness of the other two strategies could be maximized and thus that all three components working in concert were necessary to the success of the program.

CONCLUSIONS AND IMPLICATIONS

Implementing a neighborhood crime prevention program which includes changes in the physical environment, police operations, and community responses to crime is not a simple task. Because the city government, the police department and the community itself all have primary responsibility for implementation, they all must be willing to cooperatively undertake that responsibility and to subordinate individual interests to those of the overall program. However, the Hartford program has shown for the first time that an integrated project that uses urban design concepts to reduce criminal opportunities can be implemented in older urban neighborhoods without exorbitant expense and with positive results.

Although full implementation occurred over a period of two years, the police and community participation elements were in place within six months. Furthermore, once approval for construction of the physical changes was obtained, the process took less than six months. The greatest difficulty was in selling the program initially. However, as there was no precedent for such a program when the Hartford project was undertaken, this should not be surprising.

The cost of the physical changes was about \$100 per housing unit, which is reasonable indeed when considering the substantial reduction in burglary. Furthermore, the program entailed no increase in police resources devoted to the area. In fact, due to a city-wide cutback, fewer police officers served North Asylum Hill during the experimental year than during previous years.

Considerable effort was devoted to resident strategies, both during and after the initial implementation stage. It was necessary to help form two organizations and to assist them in defining an agenda. Providing consultation and technical assistance to these groups continued as an essential task throughout the project.

The community organization effort in Asylum Hill took place under relatively difficult conditions. The ideal neighborhood for a citizen-based crime control effort would consist of a stable, homogeneous population with common interests and several existing community organizations. North Asylum Hill was neither stable nor homogeneous. It had an extraordinarily high rate of transiency, and fewer than five percent of the housing units were owner-occupied. Both of these factors would indicate a less than long-term interest in the neighborhood, and should have made it difficult to find common interests around which to organize. However, the community organization effort has succeeded in bringing together people with diverse backgrounds and interests around a common goal -- improving the neighborhood.

While the program's feasibility is important to other communities, its value rests primarily on whether it is a better way to reduce crime than alternative approaches. The program's success in reducing residential burglary presents a clear indication of its merit. Police efforts alone have seldom been found to directly affect burglary. Likewise, formal community programs have proven unsuccessful over extended periods. Criminologists generally believe that only residents themselves can control burglary. In the Hartford experience, as in Newman's experience in public housing projects, a physical environment which encouraged informal efforts of individual residents (such as using neighborhood spaces and watching one another's homes) appears to have been the key to the reduction that occurred. Such resident efforts may also have been supported by police efforts to relate to the community and by the community organizations' efforts; however, the change in the crime rate occurred only after the physical changes were made.

This observation leads to the most important potential virtue of the project. The central hypothesis of the project is that physical changes provide a catalyst for fundamental changes in the way residents use their neighborhoods and relate to one another. If this hypothesis is correct, the positive changes observed in Asylum Hill should be enduring ones -- not dependent on any particular community organization, police tactics, or zeal by residents or police. The concept of synergism should perpetuate the positive changes observed, helping them build upon one another to produce even more positive outcomes in years to come.

Unfortunately, the central hypothesis has not yet been tested. It is possible that the effects observed in North Asylum Hill resulted from a short-term response of citizens and police to the unusual attention to crime, as symbolized by the physical changes. A test of the long-term effects would require a re-evaluation after the program has been in place for two or three years.

A second evaluation should enable us to choose between two competing hypotheses. According to the theory on which the project was based, the modest changes observed should provide an environment in which additional positive changes will occur. The effects should be more evident with the passage of time. The most obvious alternative theory would predict that the improvements should disappear as interest in the program wanes, thus allowing burglary and street crime rates to return to previous levels.

Until that later evaluation is completed, our conclusions about the significance of the Hartford project must remain tentative. However, even in the short period the program has been in effect, positive changes have occurred. The rate of burglary was reduced by nearly half, accompanied by a significant decline in fear of burglary. A pattern of rising robbery/purse-snatch was halted in North Asylum Hill and has shifted from interior residential streets to main streets. Residents began to use their neighborhood more and to take responsibility for crime prevention. Police developed a more positive attitude toward the neighborhood and its residents. These facts plus the feasibility of implementing this program in other communities make the Hartford program one of the most promising models for neighborhood crime prevention yet developed.

APPENDICES

APPENDIX A

IMPLEMENTATION OF THE HARTFORD NEIGHBORHOOD
CRIME PREVENTION PROGRAM

INTRODUCTION

The Hartford Neighborhood Crime Prevention Program represented a new approach to crime prevention. Although each of the three components -- changes to the physical environment, improved policing, and resident involvement in crime prevention efforts -- had been implemented individually in other sites, the Hartford program was the first to integrate them into a single crime reduction approach.

As a pioneer project, the Hartford program was a learning experience for its implementors. Valuable knowledge was gained from the five-year project, about crime and fear and their causes and about the operation of neighborhood-oriented anti-crime efforts. Problems were encountered which would not be problems today. Approaches were chosen which would not be appropriate today. Throughout the program operation issues arose which should be considered by anyone planning to undertake a similar project. These are highlighted by this document.

THE PROCESS OF IMPLEMENTATION

Implementation of the Hartford project began in January, 1975. Discussions were held in fall of 1974 with City officials, the police, residents of the project area, and members of the business community. These discussions were necessary to present the project to those who would be involved in and/or affected by the program's implementation. The project designers had developed a program of solutions directly responding to their research findings. This "pure" model had been designed without outside input. Therefore, the Hartford Institute, representing the project team, was charged with explaining the research findings and the proposed strategies, and with developing support for their implementation.

The "selling" phase was critical. The major goal during this period was to ensure that all three program strategies would be carried out as closely to the design as possible. The Hartford Institute would remain actively involved in the program, by providing assistance, encouragement, and advice, and by monitoring the progress of the three strategies. However, neither the Hartford Institute nor the other designers had a direct role in or authority over implementation. Because others -- the City administration, the Police Department, and the neighborhood residents -- would actually be operating the program, it was important that these groups understand the program, believe in its premises, accept it as their program, and be willing to operate it with as few changes as possible. It was expected that the preliminary discussions would cause some initial confusion and controversy, but it was hoped that compromises could be made which would result in a workable plan of action acceptable to all.

Physical Environment Strategies. The anticipated resistance to the physical design proposals surfaced immediately when the proposals were discussed in the public forums in the area. Non-residents, particularly black non-residents, charged that the proposals were intended to keep minority persons out of the area. Although few resident non-whites participated in the discussions, those who did participate expressed support. Most area residents were more concerned about being inconvenienced: about having to drive around the block to get to and from their homes or having to walk farther to the nearest bus stop due to a proposed rerouting of the buses from one street to another. Furthermore, many residents were skeptical that robbery and burglary could be reduced by closing streets and rerouting vehicular traffic. In

fact, some believed that the closing of some streets would make it easier for offenders to monitor entry and egress and thus identify crime opportunities. Residents believed that crime could be reduced only by increasing the number of police in the area and by having a more responsive judiciary.

Other parties objected to the changes as well. A manufacturing company on the northeast side of the area disapproved of the rerouting of its delivery trucks off residential streets. A hospital on the west side felt the proposed plan conflicted with its capacity to accommodate increased hospital traffic expected to be generated by a planned expansion. Some landlords feared that the proposed changes would interfere with the marketing of rental units.

The City government generally agreed to the plan for the physical design component. However, it was concerned about the effect of rerouting traffic. City officials worried that the construction of cul-de-sacs and the narrowing of intersections without adjustments to other streets outside the area would cause overcrowding on adjacent streets and even daily traffic jams. Of particular concern was the plan to close off a north-south arterial street which ran through the middle of Asylum Hill. Because Hartford's geographic shape is long and narrow, running north to south, there are fewer routes to handle the north-south traffic. It was feared that closing off this street would cause serious traffic flow problems on Hartford's other north-south thoroughfares.

There was also concern that the delivery of emergency and other public services would be impaired. City staff expressed concern that the changes would impede sanitation trucks and snowplows. More important, the Police Department, Fire Department and ambulance services worried that cul-de-sacs would interfere with fast emergency service.

The staunchest opposition to the physical design proposals came from small businessmen and merchants in North Asylum Hill, who feared that the rerouting of traffic would damage their businesses. They felt that their businesses depended on non-resident customers who drove through the neighborhood en route to and from work. This group remained unyielding in their opposition throughout the development process.

The various objections to the physical changes were addressed separately through a mixture of persuasion and compromise. It was necessary to persuade the community that the physical changes were a logical response to crime and that reducing crime should be more important than inconvenience caused

by driving around the block because the street normally used had been closed to through traffic. At the same time, compromises were made. A street which was planned to be closed to buses would remain open for bus traffic due to residents' objections to moving the route.

Because of the concerns of emergency service providers, cul-de-sacs were to be constructed without physical barriers; instead, curbing and traffic signs would be used to interdict through vehicular traffic. Because of the City's concerns about closing Asylum Hill's north-south artery, that street would remain open to through traffic. Although the project designers had seen this highly trafficked street as cutting the area in half and disturbing the residential character of all North Asylum Hill, the benefit to Asylum Hill of closing the street was outweighed by the benefit to the rest of Hartford of leaving it open.

Gradually the residents began to accept the model and were willing to test the physical strategies. Eventually, through their community organizations, the residents voted by a narrow margin to support the changes. Despite continued opposition among some of the resident population, these votes of support were sufficient to convince the Hartford City Council to fund and construct the recommended street changes.

Without this community support, construction of the physical design strategies could not have proceeded. Although NILECJ could fund the analysis, design and evaluation of the program, funding for implementation would have to come from other sources. Because of the economic situation in 1974 and 1975, the private sector was unwilling to provide these monies; therefore local public funding was necessary. Since construction was to be financed with public funds, the City Council required a showing of public support.

Despite significant adjustments to the plan, which resulted in several additional blocks remaining open, a group of merchants brought a lawsuit in 1975 to stop the City from implementing the physical changes. The lawsuit, which sought to restrain any changes in traffic patterns, was resolved in the summer of 1976 with an agreement which permitted construction of the changes with the understanding that they would be removed if unacceptable to the residents and businessmen after a six-month test period. Although the lawsuit was favorably resolved, its effect was a one-year delay in implementation of the physical design component.

The businessmen had effectively exposed a major problem associated with the attempt to sell physical changes to the public ways as an effective way to reduce crime. Like the area residents, the businessmen viewed a larger police force and tougher judges as the only way to reduce crime; they could not understand how crime would be reduced by reducing traffic in the area. The street changes undoubtedly would have been more acceptable if promoted as part of a broad effort to upgrade the area rather than as part of a narrow effort to reduce crime.

A problem also arose in financing the construction of the physical changes. The declining economy, which had eliminated the possibilities of receiving private corporate contributions, had also made it impossible to finance the changes out of tax revenues. The consequent necessity of using federal Community Development Act (CDA) funds for materials and Comprehensive Employment and Training Act (CETA) funds for labor caused further problems and delays.

Construction could not begin until all federal approvals were obtained. CDA monies for materials were limited. Furthermore, the use of CETA funds for labor resulted in the hiring of unskilled workers who lacked experience in construction work. Except for supervisors, construction crews were composed entirely of CETA personnel. Because of their inexperience, the CETA employees worked more slowly than a regular construction crew; mistakes had to be corrected, causing further delay. Along with supervisors from the City's Public Works Department, it was necessary for the Hartford Institute and the urban design consultants to closely monitor implementation of the physical design strategies. In addition, a Street Change Monitoring Committee was formed which was composed of representatives of the Institute, the community and the City.

Despite these delays, the street treatments were completed by the end of 1976 with the exception of certain cosmetic improvements and traffic signs. The original design had called for nine cul-de-sacs and fourteen narrowings. By the time of implementation the final plan had been revised to include only four cul-de-sacs and seven narrowings. Traffic was rerouted either around the project area or onto two key through streets, one running east-west and one running north-south. Following a visit to Oak Park, Illinois, to review how public officials in that city dealt with problems related to the closing of many streets with cul-de-sacs, the planners and City officials decided that the traffic problems would correct

themselves. The primary purpose of this visit had been to learn about Oak Park's experience. However, the exposure of Hartford's public officials to other public officials who had undertaken similar changes also provided reassurance that such a program could be implemented without adverse effects.

Police strategies. Neighborhood team policing was implemented in Asylum Hill in early 1975, after several meetings between the project planners and Chief Hugo J. Masini. Chief Masini was receptive to the implementation of neighborhood team policing in North Asylum Hill with modifications to take into account the needs of Hartford's other police districts.

North Asylum Hill was too small an area to be established as a separate police district. The project staff had therefore recommended that a new special district be created consisting of all of Asylum Hill and Clay Hill/South Arsenal, the two areas initially researched by the project team. This arrangement would enable the project to implement neighborhood team policing in the project area almost immediately; yet at the same time would be consistent with the Police Department's ultimate goal of city-wide implementation of neighborhood team policing.

The district was divided into two teams, one serving both North and South Asylum Hill and the other serving Clay Hill/South Arsenal. The district had a total complement of 59 men assigned as follows: one District Commander; two Team Commanders, one to supervise each team; six sergeants, evenly divided between the two teams; and 50 uniformed patrolmen, 25 per team. The teams were to maintain separate field offices and to consider themselves as separate entities.

In contrast to precinct houses, which serve as satellite police stations, the field offices were established solely for the purpose of enhancing the police-community partnership. Meetings with the community are held there; community-based crime prevention activities operate from the offices; and residents are encouraged to visit or call to get to know their neighborhood police. All other police operations, such as handling complaints and booking arrested persons, are conducted at headquarters.

The project team had planned for this district to receive special attention and support. However, the Chief, while receptive to the establishment of an experimental policing component in this area, was reluctant to single out one area of the City to receive special treatment. It was agreed that the Police Department would adopt a system to divide the City into five districts. Thus, while generally being able to maintain district integrity in the use of personnel, District 5 had to function within the confines of the city-wide system.

The basic organizational structure of team policing -- geographic stability, decentralization of authority, and integration with the local community -- was to remain uncompromised. The assignment of 59 officers was made according to a Police Department assessment of manpower city-wide and represented no extra allocation of manpower to the team policing area. The project team had also recommended that the department assign average officers to the team rather than establishing "supersquads". The department adhered to this recommendation.

Implementation did not come about easily, however. A very traditional department was being asked to experiment with a new style of policing and one which might erode the power of the existing command structure. Although headquarters command had expressed agreement with the concept of team policing, in practice they were unwilling to relinquish their control of the team and refused to allow the District Commander the necessary autonomy to make operational decisions within his district. Headquarters was wary of creating a special group that would consider itself separate from the rest of the department. This fear was reflected in the refusal to allow the team to hold separate roll calls away from headquarters. Regular team meetings were precluded due to an inability to vary working hours or to provide overtime pay for attendance at meetings after working hours. The lack of team meetings made it difficult for the District Commander to involve line officers in policy making or to foster team spirit. It also prevented sufficient training time for the North Asylum Hill officers to understand and to learn to utilize the physical environment strategies in their day-to-day work. As a result, the concept of considering physical design factors as well as community factors when planning police operations was never fully clarified for or utilized by team members.

The resistance to change was reflected at lower levels as well. Dispatchers ignored district boundaries and continued to dispatch officers city-wide. It was feared that this "crossover" dispatching would further hamper the ability of the District Commander to make decisions regarding utilization and deployment of manpower within the district.

The Hartford Institute was concerned that unless the District Commander was given broad decision-making power to deploy manpower and resources, team policing as initially envisioned would not take place. Therefore, early in the implementation period, the Institute met several times with the Chief of Police, the Commander of Field Services, and the District Commander in order to define the level of authority of the District Commander. These discussions led to a system of regularly scheduled meetings intended to define both the management structure for the team and the relationship of the project staff to the Police Department.

Through the meetings initiated by the Institute, problems were worked through as they arose. The Institute made efforts to recognize what could not be changed, what would have to be compromised, and how to make team policing work in spite of problems and compromises. The department became more willing to allow the Team Commander decision-making authority over team operations. Special anti-prostitution, burglary and robbery units were allowed to be formed. Dispatchers were ordered to observe district boundaries. Although pure team policing, in which all police operations are carried out at the team level, was unacceptable to the Hartford Police Department, a program of very responsive neighborhood oriented policing was gradually implemented.

Under the Hartford model as implemented, the police came to understand the value of responding to community needs and the importance of communicating police limitations and community responsibilities on public safety matters. The community came to better understand the role and limits of the police and how to work closely and effectively with the police.

Recognizing that the community wanted an ongoing working relationship with the police, the police leaders adopted a formal mechanism for police/community involvement. From the beginning of the implementation period the District 5 police leaders were involved in helping the community define its role in the project. During the three months prior to the creation of District 5, the future District Commander and Hartford Institute staff held many meetings with community groups. Their

purpose was to explain the program's emphasis on community responsibility in crime reduction and to stress the importance of community input into police planning. These early meetings were intended to form a foundation for a constructive, problem-solving relationship between the police and the community.

Through their increased interaction with community residents and especially through their active involvement with the Police Advisory Committee (see below), the neighborhood police team began to set priorities in response to community concerns. The team instituted walking beats in the area of Sigourney Square Park to discourage loitering, drinking and gambling in the park; it initiated an anti-prostitution squad which arrested "johns" as well as prostitutes; and it implemented anti-robbery and anti-burglary squads which resulted in increased arrests for those crimes. As an additional result of this increased police-community interaction, the neighborhood police took an active part in such community crime prevention activities as Operation Identification and block-watch projects, providing supplies and training sessions where needed.

Resident Strategies. During the three months prior to implementation of team policing, the Hartford Institute staff and the recently appointed District Commander initiated efforts to create a foundation for the police-community relationship. The District Commander and Hartford Institute staff arranged a series of meetings with the Sigourney Square Civic Association (SSCA), the only existing neighborhood organization at that time. At these meetings they discussed the team policing concept, explained the larger project and its emphasis on community responsibility, and stressed the importance of community input into police planning. The meetings resulted in an agreement by SSCA to form a volunteer Police Advisory Committee. This committee would meet regularly with the District Commander to review and define problems and to plot appropriate police and community responses. The committee met with the District Commander regularly through the spring of 1975. These early meetings, which were intended to form a foundation for a constructive, problem-solving relationship between the police and the community, also represented the beginning of community participation.

Also during this period the Hartford Institute staff and the District Commander began a series of discussions with a group of concerned residents of central Asylum Hill. These

meetings resulted in the formation in early 1975 of a new community organization, the Central Asylum Hill Association (CAHA). Following SSCA's lead, CAHA also established a Police Advisory Committee to meet regularly with the neighborhood police team.

The discussions held with the SSCA and CAHA committees soon disclosed both a substantial community interest in the team policing program and a commonality of concerns about public safety in the neighborhoods. Noting the common interests of the two groups and the police objective to establish a strong base for interaction with the community, the District Commander and Institute staff suggested that the SSCA and CAHA committees combine. In April, 1975, the two committees merged to form the Asylum Hill Police Advisory Committee (AH/PAC).

The creation of AH/PAC was important in establishing a solid police-community relationship. It provided police and community leaders with a formal structure in which to share ideas and information regarding public safety concerns in Asylum Hill. AH/PAC made it possible for the community to have a voice in the development of police team policy, and to work with the police to develop a meaningful role for citizens in crime prevention efforts designed to complement the strategies adopted by the police team.

The Advisory Committee increased both community understanding and support of team policing and police understanding of resident concerns. Through these meetings, the police learned that although the target crimes were fear producing, resident fear was also being caused by other neighborhood conditions such as prostitution, loitering teenagers, loitering and drinking among adult males, and drug dealing. A local park and a corner drug store frequented by "undesirable elements" were considered crime generators. In addition to burglary and robbery, these conditions would have to be addressed in order to have a meaningful impact on fear levels. Police institution of the anti-prostitution unit and the establishment of walking beats in these fear generating areas were in direct response to these resident concerns.

The community activities also resulted in the implementation of crime prevention programs. With the support and technical assistance of the Hartford Institute and the Police Department, a group of 25 residents of western Asylum Hill developed a block watch program in the spring of 1975. The program volunteers formed a nucleus around which a third community organization developed in the late summer of 1975, called Western Hill Organization (WHO). Shortly after its creation WHO also became a member organization of AH/PAC.

Individually each of the community organizations initiated such crime control efforts as block watch and burglary prevention programs. The block watch programs consisted of pairs of volunteers who walked the streets armed with citizen band two-way radios and reported suspicious situations to a citizen operator located in the Asylum Hill police field office. The operator then notified the police, who were prepared to respond. The burglary prevention program utilized volunteers to canvass the neighborhood, educate residents about burglary prevention and enlist them in Operation Identification. Private funds were provided for the citizen band radios used in the block watch programs; the police provided engravers used in the Operation Identification programs.

In addition to their direct involvement in crime prevention activities, the organizations initiated other programs designed to increase resident involvement in community improvement in general. These efforts included programs to welcome newcomers to the area and to invite them to join the community organizations; clean-up campaigns to spruce up the neighborhoods; recreational programs for youth; and social functions such as block parties and potluck dinners to which all neighborhood residents were invited. Finally, the three organizations were also involved in efforts to stabilize housing conditions in North Asylum Hill and to improve Sigourney Square Park, a centrally located park in North Asylum Hill which was feared by residents as an unsafe location.

The expansion of these organizations into other areas of concern was expected and encouraged. Crime and fear are good organizing issues. Prior to this Crime Prevention Project, Asylum Hill was considered impossible to organize; without the crime and fear issues to establish the necessary bond, it might have remained unorganized. However, these issues cannot be the life blood of a community organization. Neighborhood organizations must be encouraged to grow and to take on a broader focus which includes other issues affecting neighborhood life.

As the Hartford Institute encouraged expansion into other areas, it also encouraged independence on the part of the new community organizations. In 1975, in order to maintain a close relationship with the community, the Hartford Institute had hired a new staff member to work with the Asylum Hill organizations. This person who was recommended by the community organizations after an extensive recruiting effort, worked directly with the organizations through 1975. The community organizer attended meetings, provided technical assistance, and monitored the public safety programs. As these organizations developed and stabilized, however, the Institute began

to feel that its direct involvement in community organization activities was no longer necessary and was possibly counter-productive. The community organizations had become fully capable of self-government but continued to depend on the Hartford Institute out of habit and expedience rather than need. The Hartford Institute saw this dependency as an obstacle to their development as self-reliant organizations capable of surviving and developing under their own power and initiative. In addition, the Hartford Institute was concerned that rather than enhancing the police-community relationship, it was becoming a buffer between the neighborhood groups and the police. Therefore, in 1976, the Institute withdrew from its close association with the community organizations and instead maintained informal contact, remaining available to assist when needed.

ISSUES ENCOUNTERED DURING IMPLEMENTATION

Implementation of this project was itself an experiment. It was the first time a complex crime control project was to be implemented which involved physical environmental design, the police, and the community in an integrated effort to reduce crime. It was to be conducted in an urban neighborhood which had not asked for this type of program and was to be implemented by third parties instead of by the developers. Each of the three components was to be operated separately by parties with differing and sometimes conflicting agendas. In addition, the implementing parties had other business than the crime control project, which lessened their capacity to concentrate solely on the operation of the project.

The Role of the Coordinator. The first task to be undertaken was promoting the program design and guiding the three components into the implementation phase. To effectively perform this task, one agency needed to play a coordinating role. The Hartford Institute assumed this role. Having initiated the development of the project and having been involved in the design of all three components, the Hartford Institute was in the best position to assume this coordinating role between design and implementation. Furthermore, as a private agency, the Hartford Institute had the flexibility to devote considerable staff time and resources to the operation of a single project. Although the Hartford Institute lacked authority to enforce implementation, it had a successful track record in designing and facilitating the implementation of other pilot projects in the areas of criminal and social justice. Past success, an ability to persuade, and a reputation for getting things done provided the Institute substantial influence with those responsible for implementing the program.

As an entity with the authority to require implementation, the City Administration might have assumed the coordinating role. However, City governments have other constraints which might impede the progress of such a project. First, city administrations lack the money and flexibility to devote staff to ongoing projects outside the day-to-day responsibilities for which they are answerable to the taxpayers. In addition, it is difficult for a public agency to justify devoting special attention and resources to a single geographic area within their jurisdiction, even though the money to be spent came

primarily from federal sources. It would be easier for the City to justify spending primarily federal funding on a demonstration project operated by a private agency, especially a project which would be applicable to other areas if successful.

Developing a Program for Third Party Implementation. The normal approach to the implementation of this type of project would have been for the City to determine the need for a crime control project and to hire the Hartford Institute (and any consultants that the Hartford Institute might hire) to study the problem and design a program to be implemented by the City. In this case, although there was concern about crime and crime-generating problems in Asylum Hill, no formal efforts aside from traditional policing had been made by the City to address those problems. Instead, the Hartford Institute initiated the development of the project; obtained agreement by the City to allow and to participate in implementation; obtained funding; and developed a program to be implemented by the City government, the Police Department, and the community. Thus, the Hartford Institute, an uninvited outsider, was in the position of designing and selling a multi-faceted crime control project in a community which had not asked for the program.

Therefore, even during the design stage, the planners realized the need to design a model which the implementors would be capable of implementing and willing to implement, which allowed for compromises, and yet which applied sufficient checks to ensure that the program would be implemented basically as envisioned. In designing each component, the planners had considered the strengths and limitations of those who would ultimately implement it. The completed draft design was then to be presented to its future implementors for their reactions and recommendations. Through this process, the planners hoped to be able to revise each model until acceptable to its implementors, and yet to control the model design, and prevent excessive alterations.

A more appropriate approach would have been to design the program with input from those who would have to make the program work and who would have to live with it. Today it would be impossible to develop such a program without the early involvement of the residents of the target community and others to be affected by the program. Neighborhood residents today are more sophisticated and have developed their own agenda of neighborhood improvement so that a crime prevention program would have to be integrated with that agenda.

Selling the Program. Because the plan had been arbitrarily determined by the project team at the outset without prior input from those who would be implementing the program, the selling of the program was crucial. Although City officials, the Police Department, and community leaders had been in contact with the Hartford Institute during the data collection and model design phases, the majority of the residents were unaware that such a program was even being contemplated for Asylum Hill. Although many recognized the need for the project and saw the project as an indication that City officials were interested in revitalizing their neighborhood, others were wary of outside involvement in their community. The community had not asked for the program, they had not invited the Hartford Institute to plan their future, and many disagreed with the Institute's proposed solutions to their crime and fear problems. The Institute could not impose its model on an unwilling community; the community would have to agree to the program to be implemented.

The program would have been easier to sell if it had been presented in terms of broader strategies for neighborhood improvement. Today such a program would probably be linked to a more comprehensive neighborhood improvement plan. With the availability of HUD's Community Development Block Grant (CDBG) and Urban Development Action Grant (UDAG) money for neighborhood improvement, crime reduction strategies are increasingly linked with programs for the overall betterment of the community.

Negotiations and Compromises. Extensive negotiations and compromises on all three elements of the program were inevitable. Because of the compromises, the programs that were actually implemented varied considerably from the initial intentions of the project team. Compromises were made which had both negative and positive impacts. Negative consequences included a delay in implementation which might have reduced the impact of the proposed program on crime and fear. Elimination of some of the proposed physical changes rendered it more difficult to evaluate the impact of the physical changes as a discrete element of the project.

While the process of compromise was time consuming and often painful, it served to strengthen implementation. Each compromise resulted in increased participation by those who would have to make the program work and increased responsiveness to the needs of those toward whom the program was directed. However, if all those who were to be part of the project had been given a role in the decision-making at an

early stage in the project, there probably would have been greater receptivity to the project, greater willingness to get the program underway, and possibly fewer changes in the original design due to a clearer understanding of the underlying rationale.

Hartford Institute's Lack of Authority. The Hartford Institute's lack of authority over the program implementors caused a tightrope situation for the Hartford Institute. On one hand, as recipient of the project's funding, the Hartford Institute was responsible for designing a workable program and ensuring implementation of that program. On the other hand, it lacked the necessary control to ensure implementation. To compensate for its lack of control, the Hartford Institute maintained close contact with all implementing parties, responded to community concerns and priorities, provided technical assistance, facilitated communication among the three components, and monitored all facets of the project.

Unforeseen Problems. Because of the innovative nature of this project, problems arose which were unanticipated and which were outside the control of the project. The physical design component was affected by the businessmen's lawsuit and by economic problems. The effect of the lawsuit was a one year's delay in beginning construction of the physical changes. Economic problems which had forced the City to find outside funding caused further delays. Red tape involved in obtaining CDA money was time consuming. The hiring of unskilled and inexperienced CETA workers to supplement the CDA funding further contributed to the delays.

The delay in implementation of the physical design component affected the entire project. The police and community components were operating a full year before construction of the physical design component was begun. Because this component was to be the cornerstone of the project, the project as planned was not in operation until late in 1976, two years behind the target start-up date.

The economic problems also affected the functioning of the Police Department and thus the police component. Due to budgetary cutbacks, manpower was allowed to decrease. Vacant positions caused by resignations and retirements remained unfilled. As the force shrank, line personnel were pulled into headquarters from the field to perform administrative duties. This practice affected the manpower and functioning of the

Asylum Hill team. The manpower cutbacks on the team caused curtailment of all but necessary patrol. Walking beats were discontinued; special prostitution, robbery and burglary squads were disbanded; and losses among sergeants on the force caused a shortage of sergeants in District 5. Not only did this hamper the project operations, but it lowered morale and reduced prospects for the development of team spirit. This problem was never resolved. In planning similar projects, police departments should be apprised of the minimum manpower needed to operate a viable team policing component and should be persuaded to commit the necessary manpower and resources for the duration of the project.

An unforeseen condition that might have posed a problem was the rapidly changing character of North Asylum Hill. This area was both highly transient and transitional. Residents, who primarily were renters, moved in and out frequently and those moving out were being replaced by persons with little stake in the neighborhood. Of particular concern was an apparent influx into the neighborhood of known offenders. In short, a program had been designed for an entirely different population than the population living in North Asylum Hill during the implementation. The planners were concerned that the outcome would be ineffective.

Fortunately, the project had been designed for quick and simple implementation in order to stabilize the crime problem and reduce fear. By making the residents an integral part of the project, it sought to increase their stake in the neighborhood and enhance their confidence in the viability of their neighborhood. If crime and fear could be turned around, perhaps the physical and social decline could be turned around. This proved a successful tactic. Evaluation findings indicate that after a year of program implementation, residents had begun to have an increased stake in the neighborhood. Furthermore, not only were fewer crimes committed in North Asylum Hill, but persons arrested for committing crimes in Hartford have tended to reside in neighborhoods other than North Asylum Hill.

SUMMARY

The Hartford program was unusual in that the program had been developed by outsiders for a neighborhood which had not requested it; the neighborhood residents, who would be affected by the program, had not been consulted for their input into the program design; and those who were to implement the program had played no role in the planning process. Some decisions made during prior stages of program development adversely affected program implementation. Some of those could be avoided by anyone undertaking a similar project today. The major issues to be faced during implementation are listed below.

1. In a project involving a number of key actors, one party must assume responsibility for shepherding the plan into implementation. This coordinating role may be performed by the city government or an office within the city government. However, this responsibility may be assumed with less difficulty by a private organization similar to the Hartford Institute.
2. It is difficult to ask the community to implement a completed program model into which the community had no prior input. Selling a completed package causes delays and obstacles which could have been minimized at an earlier stage. A community is more likely to be receptive to a program in the design of which it had played a significant role.
3. Compromises between the program model and the implemented program should be expected. The program model should be sufficiently strong and sufficiently flexible to allow for compromises without destroying the intent and ultimate effectiveness of the program.
4. If the coordinating agency lacks authority to control implementation, it must be willing and able to spend the time and effort necessary to persuade the various implementors of the value of working together to ensure effective program implementation.
5. Unforeseen problems and obstacles will occur. The program should be sufficiently flexible to respond to these problems when they arise without sacrificing the integrity or the effectiveness of the program.

2
APPENDIX B

THE EVALUATION OF THE HARTFORD EXPERIMENT:
A RIGOROUS, MULTI-METHOD EFFORT TO LEARN SOMETHING

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Introduction

Evaluation means many different things. The goals of the evaluation of a program can include:

- a. describing the activities;
- b. assessing the impact of the program, the way things are different because of the program;
- c. learning about the reasons for the program's success or failure.

Usually some information is gathered or collated. The amount and type of information collected, as well as the methodological rigor, varies, of course, from project to project.

The Hartford project was complex, as is usual for environmental design programs; therefore, it was relatively difficult from an evaluation design point of view. The goals of the evaluation included all three of those listed above: detailed description of the programs implemented, an assessment of the program impact on crime and fear, and, most important, an effort to further general knowledge about crime reduction or control. The design was comparatively elaborate and the methods were comparatively rigorous.

For these reasons, the evaluation of the Hartford experiment provided an unusual opportunity to learn about some strategies for evaluation that were successful and may be useful in other evaluations. The purpose of this paper is to present some of the lessons that can be learned.

The Nature of the Program

In order to understand the research, it is first necessary to understand the program.

The Hartford Project was an experiment in how to reduce residential burglary and street robbery/pursesnatch and the fear of those crimes in an urban, residential neighborhood. Its most distinctive feature was its integrated approach to crime control: police, community organization, and physical design changes were all used to increase the willingness and ability of residents to control the neighborhood to reduce criminal opportunities.

The initial planning for this project occurred in 1973. Analysis of the crime in the area was undertaken by an interdisciplinary team. Its task was to understand the way residents, potential offenders, police and the physical environment interacted to create criminal opportunities; and to design inexpensive strategies that could be quickly implemented to intervene in the pattern of rising crime.

A principal conclusion of the analysis was that a number of features of the physical environment were working to destroy the residential character of the neighborhood. Cars and pedestrians passing through the area dominated the streets and depersonalized them. The streets belonged more to outsiders than to residents, creating an ideal environment for potential offenders.

Based on this analysis, a lengthy planning and implementation period ensued. In 1976, a three-part program was fully implemented that included:

- a. closing and narrowing streets as a main strategy for reducing outside traffic and increasing the residential character of the neighborhood;
- b. instituting a neighborhood police unit with strong relationships with the residents; and
- c. creating and encouraging area organizations to work with the police and to initiate resident efforts to improve the neighborhood and reduce criminal opportunities.

Five features of the experiment were particularly important because they complicated the evaluation.

1. The program was implemented in only one neighborhood area which had a population of approximately 5,000 people. Therefore, there was only one test of the concepts and ideas.
2. As noted above, one essential component of the Hartford experiment was its multi-faceted nature. Perhaps the cornerstone of the project was the street changes, by which the planners hoped to limit vehicular traffic in the neighborhood. However, the police and community organization components of the project were important as well. Each was seen as a potential catalyst to resident

initiatives to crime control, both formal and informal. Describing the implementation and, more importantly, assessing the significance of each program component added considerably to the complexity of the project.

3. A related but different point is that the way the program was supposed to reduce crime and fear was complex and involved a chain of events. The fundamental premise of the program was that the residents themselves, through their informal efforts, could reduce crime and thereby fear, by taking control of events in their neighborhood. Each of the program components was intended to increase the ability or willingness of the residents to control the neighborhood. Such a model is complicated conceptually and analytically.

The best example of this complexity is the role of the street closings in crime control. Many residents, and even some of the police, could never get over the notion that the purpose of the street closings was to keep out offenders. Properly skeptical that anyone who wanted to enter the neighborhood would be deterred, such people could not believe that the program would have any effect on crime. They failed to grasp a chain of logical steps: that the effect of a lot of traffic in residential areas was to deperationalize them; that a reduction in traffic would make the outside spaces more pleasant and attractive for use by residents; that if residents used the outside spaces more, it would increase the likelihood that they would take an interest in and become involved in what went on in the public and semi-private spaces near their homes; that such an interest would make it less likely that offenders would lurk in the neighborhood, waiting for criminal opportunities.

In essence, the street changes were one important part of an effort to restore the residential character of the neighborhood and give the area back to the residents. Part of the evaluation goal was to learn more about whether the hypothesized chain of events really worked. The analytic complexities of accomplishing that were considerable.

4. The planning and implementation of the program took place over a three-year period. This is fairly typical of environmental design programs. However, such a time period provides considerable opportunity for other, unplanned events to occur to further confuse the evaluation.
5. The program, including the physical changes, was in place less than a year when its impact was evaluated. Timing has considerable effect on evaluation. On the one hand, an early evaluation can show the effects of attention, regardless of the content of the program (Hawthorne Effect). On the other hand, some of the goals of the program, such as increased commitment to the neighborhood, might well take longer than a year to develop.

Each of the above points basically meant that the program was complicated to evaluate. In order to evaluate a complicated program, one is likely to need a complicated evaluation scheme.

Types of Measures

Two goals guided the research design. First, an attempt was made to measure each important concept or variable in at least two different ways using different methods. Second, although there was a commitment to quantitative evidence regarding the program, the design provided a variety of opportunities for qualitative feedback as well.

The multi-method approach to measurement is cited as desirable in almost any text on methodology. It is well known that any particular way of measuring something has its limits and likely biases. Conclusions based on different ways of measuring the same thing are likely to be sounder because they transcend the limits of any particular method. A distinctive characteristic of the Hartford experiment was not that the multi-method approach was valued but rather the extent to which the project team was successful in finding more than one way to measure the same phenomena.

Victimization rates and fear were measured by a sample survey of residents. Since the purposes of the program were primarily to produce improvements in crime and fear of crime, some sort of resident survey was essential. However, the

survey also was used to measure a wide range of resident perceptions and behaviors. In fact, for almost every aspect of the program and its effects that were studied, a useful set of measures came out of the resident survey.

Fear of crime was one of the few variables for which a second source of quantitative data was not developed. It is hard to measure fear except by talking to people. However, the views and observations of a panel of community leaders were solicited via semi-structured interviews to supplement the survey data.

With respect to crime, a second available source of information is, of course, police records. In this regard, the Hartford experience provides a good example both of the value of a multi-method approach to measurement and, in particular, of how essential victimization surveys are in assessing crime control programs.

It has long been known that a considerable portion of crimes that occur are not reported to police. Rates of burglary and robbery/pursesnatch derived from surveys are routinely two or three times the comparable rates derived from police records. However, it has been argued that for the measurement of trends over time, police records will provide a meaningful indicator of whether crimes are going up or down.

In Hartford, there was an opportunity to carry out victimization surveys over a five-year period, and to compare the figures from the victimization surveys with comparable figures from police records. The results of this comparison are not surprising to those who have studied factors which affect police record estimates. However, they provide a warning to those who would rely on police record data alone as indicators of rates of crime.

During the five-year period in which Hartford crime was monitored, the study showed not one but two different occasions when, for reasons which had nothing to do with the rate of crime, the trends in crime based on police record data were very misleading.

The first case parallels a classic police anecdote. The introduction of a new Chief of Police in Hartford in 1974 was accompanied by an apparently massive increase in crime. ~~Vic~~timization survey data showed that the increase was largely due to improved reporting practices on the part of police officers!

Three years later, the police record data showed a city-wide drop in burglary, while the victimization survey showed an increase. Some further research revealed that one of the symptoms of some continuing contract negotiation problems between the police and the city had been a sharp decline in the rate at which calls for service had yielded reports of actual crimes.

This experience illustrates two points. First, what shows up in the police records as a reported crime is dependent on both the behavior of citizens and the behavior of police officers. Extraneous factors which affect the behavior of either can have important affects on police record data and, consequently, on comparisons over time based on such figures. Although victimization survey estimates are not perfect by any means, the sources of bias or error should be consistent from time to time if a survey is properly done. Comparative statements based on victimization surveys should be reliable.

The second point to note is the value of the multi-method approach. In this case, the survey and the police record data did not produce the same conclusion. When this is the case, the discrepancy can make the researcher do further investigation. If only one method is used, the results are likely to be taken as accurate. Many evaluation studies, unfortunately, provide little potential for seeing inconsistency because of the lack of overlapping measures. Obviously, the more such overlap can be built in, the less likely the researcher is to make an error, and the more convincing will be the conclusions based on the research.

Measuring the use of spaces proved to be one of the most complex parts of the evaluation. In their initial analysis of the area, the urban designers had made numerous observations about the relationships between residents, non-residents and the spaces in the area: The neighborhood is depersonalized. Strangers dominate the streets. There does not appear to be any social cohesion. The parks are not used in an appropriate way.

Changing such things was an essential intermediate goal of the program. Therefore, it was incumbent upon the evaluation team to be able to make statements about whether and how much such changes occurred. To do that, it was necessary to quantify, or at least systematize, the observations of the urban design team.

Counts of vehicular traffic on Asylum Hill streets, which entail only the placement of counting machines for 24 hours, were one obvious source of information about vehicular traffic. The pattern of pedestrians' use of those streets was quantified by using human counters stationed at strategic spots for five different hour-long periods during the day. Days were standardized in that they had to be at least minimally attractive for walking; i.e., the temperature had to be above 50 degrees with no precipitation. Counters not only counted the number of persons passing their spot; they also coded them into sex, age, and ethnic categories by observation.

A third important source of information about the use of the neighborhood came from the survey residents, of course. Their perceptions of the vehicular and pedestrian traffic as well as their reports of their own behaviors were important input into understanding how the neighborhood was being used.

Finally, the urban design team attempted to codify their observations. Based on a series of systematic walking trips through the area at specified times of day, they put on maps the people observed and their activities. The goal was not necessarily to produce a statistical basis for conclusions, but to systematize their observations, to provide some basis against which to compare observations at a later point.

In fact, there were significant problems in actually reaching conclusions based on changes in their coded observations from one time to another. Relatively little analytic use was made of these data. However, figuring out some way to codify observations of use of space is important to studies of environmental design programs. More work is needed to figure out how to do it well.

In summary, analysis of the way the land was used and how that might have changed as a result of the program was based qualitatively on the observations of the urban designers and the reports of people in the community; it was based quantitatively on traffic and pedestrian counts and standardized survey measures administered before and after implementation.

Data on police were gathered in a similar way. Qualitative information was available on police operations from at

least two sources. First, on a routine basis, the team leaders met with Hartford Institute staff to review plans and problems. The Hartford Institute staff, in turn, produced routine summaries of significant happenings with respect to policing in the area. In addition, an outside monitor, experienced in police operations, spent a couple of days every two months visiting with the police team: talking with leaders and patrol officers, riding in patrol cars and reviewing record data. Both of these were extremely important to having an accurate, up-to-date picture of the police component of the program.

In addition, there were three more quantitative sources of information about the police. First, the police officers themselves filled out a questionnaire shortly after the police team was established and again near the end of the evaluation period. The resident survey included a number of questions both about resident perceptions of the police and about their own behavior with respect to the police. Included were items about reporting crimes to police, the amount and quality of contacts with police as well as citizen perceptions of response time, responsiveness and police effectiveness.

Finally, the police department's own records provide a quantitative indicator of police activity. Calls for service, arrests, and reported crimes all provide information which can be useful to an overall analysis.

The activities of the community groups that were formed in Asylum Hill were monitored in several ways. The Hartford Institute provided a good deal of information about these groups. Staff members attended most early meetings and had frequent contact with the groups throughout the project. Their knowledge about activities and problems was periodically summarized.

In addition, a set of people knowledgeable about the community was interviewed in a semi-structured way on two occasions. Officers and leaders of the formal organizations in Asylum Hill were among those in the panel, and one of their particular contributions was to provide additional information about the groups and their activities.

¹The Hartford Institute of Criminal and Social Justice was responsible for implementation of the projects.

Finally, of course, the resident survey once again was an invaluable source of information about residents' participation in and knowledge of the community organizations that were trying to help them.

Thus, for each component of the program, the evaluation was able to draw on multiple sources of information. In some cases, exactly comparable measures were available from two different sources. In other cases, the data were complementary. In almost all cases, however, the fact that there were multiple sources of information significantly reduced the likelihood of an inadvertent error about what was going on and significantly increased the strengths of the conclusions that could be reached.

Analysis Strategies

There were two basic kinds of analytic conclusions that the evaluation was asked to come up with. The first question to be answered was whether or not the program was successful in reducing burglary and robbery/pursesnatch in Asylum Hill and the fear of those crimes. Second, regardless of the outcome, was there something to be learned from the experience in Hartford that would help others to design a crime reduction program in existing neighborhoods?

The impact analysis actually turned out to be two questions. Did crime and fear improve in Asylum Hill? and, was the program responsible for the improvement?

It is evident from the fact that the second question had to be asked that the answer to the first question was affirmative: at the end of a year, burglary and the fear of burglary had dropped to a level of approximately half of what one would have expected without intervention. Statistically, that was a highly unlikely chance event. In addition, although the data on robbery and pursesnatch were less conclusive because of the comparatively low rates of those crimes, the odds were better than 2 out of 3 that those crimes and the fear of those crimes had also improved.

But was it the program that was responsible for this reduction, or was something else at work? It turns out to be extremely difficult in social science to prove that there is not a mysterious unidentified factor responsible for results. However, in this situation, the presence of the extensive Hartford data base was a tremendous asset in making alternative hypotheses less plausible.

One set of hypotheses was ruled out by analysis of city-wide data. The harshness of the winter, a change in economic climate or the inception of a city-wide offender-work program all could have been plausible alternative reasons for a reduction in burglary. However, they would have affected the city as a whole. The decline observed in Asylum Hill occurred in the context of an overall 10 percent increase in crime throughout Hartford.

Having data on Asylum Hill in 1973, 1975, 1976 and 1977 helped to address other hypotheses. The improvement that was observed occurred in the experimental year of 1976-1977, not before. Prior to the experimental year, crime rates and fear in Asylum Hill had been rising steadily. Only events that would not have affected the crime prior to 1976 but then would have had a dramatic effect just during that year needed to be considered as plausible alternatives.

This logic was quite important in addressing one of the most compelling alternative ideas: that the offender population that had worked in Asylum Hill had moved away. A public housing project which had produced a disproportionate number of criminals working in Asylum Hill had been "thinned out". There also had been quite a bit of abandonment and demolition in an area north of Asylum Hill where offenders had been known to live. It was, of course, not known exactly how many offenders had moved, nor whether they had moved far. However, that at least some of them had moved somewhere was almost certain.

There were, however, two facts which argued against this change being a major factor in the observed reductions in crime in Asylum Hill. First, the thinning out of the public housing project and the housing abandonment had been going on for at least a year prior to the experimental year. One would have expected to see effects of this prior to the 1976-1977 year if it was significant. Second, detailed victimization data on areas around Asylum Hill did not show declines in burglary and robbery such as those found in North Asylum Hill. Since these areas were within reach of the same offenders who worked in North Asylum Hill, one would expect a significant change in the offender population to have affected these adjacent areas as well. Thus, the data permitted one to rule out a change in the offender population as a significant factor in the observed crime reduction with a considerable degree of confidence. Had the data been less rich, that hypothesis might well have seriously undermined confidence in the conclusion that the program affected crime.

The above deals with negative arguments, trying to rule out alternative hypotheses. Another approach is to produce documentation that the program produced changes which could plausibly reduce crime.

It will be recalled that the key to crime reduction was thought to be increased resident control over the neighborhood. There was considerable evidence that things had moved in a positive direction in this respect: vehicular traffic had clearly been restructured and reduced overall; there had been some reduction of pedestrian traffic on residential streets, though that was not always the case; residents reported that they were doing significantly more walking in the area and were using the parks more; they reported that their stranger recognition had improved; they reported more frequent arrangements with neighbors to watch out for one another's houses.

These changes, most of them statistically significant, helped to buttress the notion that the program had succeeded in starting a chain of events that plausibly could lead to crime reduction. On the other hand, there were some changes that were expected but not observed. Optimism about the neighborhood's future had not improved. While fear of the target crimes had gone down, there were a number of neighborhood problems which, in the view of residents, had not improved.

Of course, data alone, no matter how good, do not eliminate the role of judgment. Were the changes observed dramatic enough to have produced a 50 percent reduction in burglary? Some reviewers will be more convinced than others. However, because of the extensive data base, critics of the conclusion that the program reduced crime and fear during its first year have a difficult case to make. The possible alternatives identified by the research team do not hold up under scrutiny. Could there have been an heretofore unnoticed event that occurred at roughly the same time as the street closings, affected North Asylum Hill but not surrounding areas, and had the exact effect the program was designed to have?

In social science, it is difficult to prove anything definitively. However, the case for a program impact seems much stronger than the case against.

To produce generalizable knowledge was the other analytic goal of the evaluation. Based on one demonstration, there is no statistical basis for generalizing. The foundation on which one generalizes from a single experiment is conceptual rather than statistical. It is in this context, again, that the complex data base developed in Hartford both before and after program implementation was critical to the value of that experiment to others.

There are two kinds of questions that a person considering the Hartford model would want answered. First, was the situation identified in North Asylum Hill sufficiently similar that one could apply the analysis to another community? Second, did the apparent success of the intervention in North Asylum Hill say anything about the likely success or failure of other similar interventions. Through detailed description of the "before" situation, a good evaluation should enable a person to answer the first question. Through analysis of the dynamics of the intervention, and detailed description of what was implemented and with what effect, a reader should be able to begin to address the second question.

The analytic value of good, comprehensive data was once again demonstrated in connection with the question of the role of the three components - physical changes, police and community organizations - in the program's success. Fortunately, two unplanned natural experiments occurred that permitted a fairly definitive answer.

In the target area, the police and community organization components were begun a year before the street changes were made. However, it was only after the street changes that crime and fear declined.

An area adjacent to the target area was served by the Asylum Hill police team and also developed a significant crime-oriented community organization. However, no street changes were made in this area, and no decreases in crime or fear occurred.

Although the role of the other components cannot be assessed fully, it is clear that the physical design changes were necessary to the success of the program. Being able to make that statement is very important to those who would learn from the Hartford experience. The answers will seldom be definitive or unassailable. However, the better the quality of description and understanding that an evaluation produces, the more likely it is to be useful to others.

Conclusion

The evaluation of the experiment in Hartford was unusually full and complete. Even so, there were desirable steps not taken because of limited funding. For example, although offender interviews were conducted in the planning stages of the project, none were done after implementation. There were ways in which the monitoring of some of the community activities was not as detailed as it could have been. More money and more time would have reduced the number of gaps in the analysis, but clearly would not have eliminated them all. Social science evaluations do not produce certainty very often, and this one was no exception.

Having made that point, perhaps it is appropriate to close with a more general comment about the importance of good methodology in evaluation research.

The jumping-off point for evaluation research was probably the experimental designs outlined by Campbell and Stanley many years ago. Those faced with the task of evaluating real projects soon found that the conditions for true experiments were seldom met. Moreover, it was observed that often the results of even careful evaluations were inconclusive.

There have always been those who considered research a waste of time and money. There have always been practicing researchers who, through lack of sophistication or for other reasons, did methodologically weak research. Such people have found support from methodologists who focus on the limits of evaluation and understate the achievements, both real and potential. From the statement that definitive conclusions are unlikely to result from evaluations, it is an easy leap to decide that the quality of an evaluation does not matter.

There are many programs that are so poorly conceived or implemented that they warrant little or no investment in evaluation. However, at any point in time, there is extant a set of ideas about how to deal with a certain kind of problem, in this case, community crime control. When a program is implemented which provides the opportunity to learn something about the validity of those ideas and how to apply them, a serious, careful research evaluation effort is a very good investment. There is no possibility that even a tiny fraction of the funds spent on poor or ineffective programs will ever be spent on research.

To criticize evaluations that do not meet strict statistical requirements for experimental generalization is to hold up an artificial standard. The goal of evaluation research is to learn. Learning means to reduce uncertainty about the way things are and the way things work. It does not matter how well a research evaluation is carried out; whether the effort be large or modest, the better the methodology, the more uncertainty will be reduced.

The Hartford project was not a perfect evaluation. It was a good one. Most important, the rigorous and comprehensive approach to evaluation that was utilized was essential to the general value that can be derived from the project. It was a serious attempt to learn something important. More such efforts are needed.

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